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SEX DIFFERENCES IN FANTASY PATTERNS:

A REPLICATION AND REFINEMENT

A Thesis Presented

By

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Submitted to the Graduate School of the
University of Massachusetts in partial
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Department of Psychology

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C H A P T E R I

INTRODUCTION

Man has long pondered the mysterious nature of women. That they are different has always been undeniable. From the earliest years a child gains knowledge of his/her gender: the other sex not only looks different but acts differently too. While gender identity may begin with the different biological structure of boys and girls, it extends into "subtleties of thought, feeling, and imagination" (May, 1966, p. 570). Because sex-roles are a product of the crossing of genetics with cultural teaching, it is difficult to talk about what is innate to the psychological profile of men and women (e.g., Anastasi, 1958; Chodorow, 1971; Maccoby and Jacklin, 1974). In studying these differences, however, researchers often focus on the sexes as opposite and not merely different. A decade ago, McClelland (1965) warned psychologists against comparing men and women along single dimensions, where the females can only come out as "not male."

Some studies done in recent years have harkened to McClelland's advice. Researchers attempt not to set up male/female individual traits at opposite poles, but rather to look at patterns of behaviors, or constellations of traits, that distinguish between the sexes (Rosenkrantz, Bee, Vogel, Broverman, and Broverman, 1968; Lunneborg, 1970, 1972; Bem, 1972; Entwistle, 1972; Horner, 1972). In addi-

tion, some, rather than searching for the obvious cultural stereotypes, try to ascertain more subtle or personal differences distinguishing the sexes. Robert May (1966), attempting to do both, theorized and studied a pattern of fantasy that was different for men and women.

Theoretical Foundation

The female pattern. May's concept of masochism as a typically feminine trait is drawn from Freud's and Deutsch's writings. Noting the constitutional differences between men and women, Freud hypothesized that females envy the male's penis (1924b, 1925, 1931). Further, themselves being a "passive" receptacle, females learn "passive" social behaviors. In contrast, males with their "active", thrusting organ, develop "active" and aggressive personality traits. These constitutional differences are exaggerated by society, and cultural differences reinforced. Thus females learn to repress their aggressiveness, to inhibit their activity, and to submit to domination, which promotes the development of masochism, or the "tendency to derive pleasure from one's own suffering" (Funk & Wagnells, 1966, p. 832). By doing so, they are socially rewarded. "Pain and pleasure come to be perceived as necessary and even as desirable preludes to the experience of tension-release, love, and the fulfillment of desire" (Fried, 1971, p. 38). The result in females hypothesized by Freud appears to be an unconscious association of pain and pleasure.

Deutsch (1944) expanded Freud's idea to include passivity and narcissism, along with masochism as the three primary traits making up the "feminine core." She specifies the male parent as a primary reinforcer of the daughter's renunciation of her aggressiveness for love. As evidence, she cites the pain/pleasure a little girl derives from roughhousing with her father. In her clinical practice, Deutsch observed that a woman was willing to risk her physical or psychological self in order to obtain something of value; the compensation for her suffering (be it physical or emotional discomfort) is love received. Her examples include "subjecting oneself to a man's will, being attracted by suffering, a painful longing and wish to suffer for the lover, renunciation in favor of others, rape fantasies, and the willingness to serve a cause or a human being with love and abnegation" (May, 1966, p. 577). The common theme throughout is inhibiting immediate desires in hope of a future reward (delayed gratification), or deprivation followed by enhancement. Clearly, in this theoretical framework, the social forces (i.e., sex-role expectations) combine with the biological determinants to produce, to more or less degrees, a masochistic nature in females.

Although May's focus is on masochism in the fantasies of women, he looks to certain bodily facts for support that masochism is primarily a feminine trait. Quoting Deutsch, he cites the painful experiences of defloration, menstruation and childbirth as the real nuclei from which these fan-

tasies originate. Deutsch says, "often the fantasy is divided into two acts, the first, the masochistic act, produces the sexual tension, and the second, the amorous act, supplies all the delights of being loved and desired" (1944, p. 255). Out of this approach May defines his concept of feminine masochism as a "typical sequence or pattern of action and feeling. Suffering followed by joy, failure followed by success, risking oneself followed by love . . ." (1966, p. 578).

The male pattern. May begins his description of the male's pattern--that is, anxiety about precipitous failure--by recounting Murray's (1955) study of the Icarian syndrome. In the Greek myth, Icarus is the son of the sculptor, Daedalus. When the two were thrown into prison, Daedalus fashioned wings for them to use for escape. Although he had been warned to fly at an even height, Icarus, exulting in his power to fly, soared upward. The sun softened his waxen wings, and Icarus plunged to his death. This myth symbolized a pattern that Murray noted in several of his clients--the wish to be a spectacular success (to fly or rise) and an underlying fear of failure (falling or losing one's self-confidence). The basic pattern, then, is one of ascension followed by descension. "Murray feels that one of the experiential bases of the ascension-descension cycle is the repeated sequence of phallic tumescence and detumescence . . . most males have this biological experience over and over from the

early years of life . . ." (May, 1966, p. 578).

May applies Murray's theory to men in social situations. He notes that men are always trying to prove themselves, and the more anxiety associated, the more fear of "falling down on the job" (p. 579). Life is experienced as having a perpetual order: after an upgrade there must be a decline. A glaring example of this pattern is the fear of increasing age and ultimate death. Women, in contrast to males' fear and anxiety regarding death, are reputed by the preceeding authors to welcome death as the final lover (see May, 1966).

Mention should be made that May's use of the Icarian syndrome is idiosyncratic, referring to a pattern of ascension followed by descension (1971). This is not comparable, nor is it meant to be confused, with Murray's clinical description. To Murray, the term is used to characterize an immature and narcissistic person, who sets goals far beyond his potential, and who fantasizes successes unrelated to the reality of his life (1955). Through May's studies, fantasies with "a pattern of success followed by failure, gain followed by loss, high expectations followed by unsatisfying achievements," are considered Icarian (1966, p. 579). Movement then, not solely themes, is crucial.

Reflections on the theme of feminine masochism. The question of whether masochism is primarily descriptive of females versus males has been of some heuristic interest, frequently with results confirming the assumption that masochism

is typically feminine (Aronfreed, 1964; Douvan and Adelson, 1966; Walster, Aronson and Brown, 1966). One recent study with 96 high school students found that all subjects who were manipulated to transgress, by cheating on an exam, gave themselves higher shocks than those who did not (Wallinton, 1973). Regardless of having cheated or not, women were more self-aggressive ($p < .05$). The author suggests that transgression appears to cause the wrongdoer to effect his/her own punishment. Why people behave this way, she postulates, originates with parents who use psychological and verbal rather than physical methods of discipline. Because "parents are more likely to use psychological discipline with girls than with boys" (p. 6), it follows that females would respond to transgression with self-punishment more frequently than males.

Further work has been done to delineate degrees and qualities of masochism among women. Douvan and Adelson (1966) divided their sample of 1925 adolescent females into high and low femininity groups on the basis of their response to a simple index (seven questions) of traditional feminine interests. From the extreme group of high feminines ($N=164$), the following data were derived.

The evidence supports the psychoanalytic notion that feminine women tend to accept and tolerate, even take pleasure in, a measure of pain. We find that feminine girls are more intrapunitive, more self-blaming than nonfeminine girls Feminine girls worry more than other girls, and name

more disappointments they have suffered
 It seems they hold on to the experience longer and more consciously than other girls do. We also find a consistent relationship between femininity and reported discomfort during menstruation (p. 239).

The authors are quick to point out that the feminine girl is not selfless or passive. Passivity may appear in interpersonal relationship in her overt behaviors, but covertly she works to maintain the relationship and solve problems and conflicts that arise. In essence she has a high degree of personal integration. Unfortunately the authors do not discuss masochism in relation to male adolescents.

There are results contrary to the assumption of masochism linked to women. For example, Kinsey (1953) found that masochistic experiences like that of being bitten are very nearly identical in both sexes. In terms of sexual fantasies, women reported arousal by sadomasochistic stories less frequently than did men. More striking is that only 40% of Kinsey's female subjects admitted to sadomasochistic fantasies.

Questionable too is the premise that females derive pleasure from pain attendant with defloration and/or childbirth. In the former incident, it is not uncommon for a couple to strive for an easy penetration via various methods. In regard to childbirth, most women seek either to be anesthetized, to escape from the pain, or to learn "natural childbirth" techniques, to avoid drugs and/or experience the

joys of giving birth with reduced pain. Since these methods became available, it is a rarity to find any woman not utilizing one of them.

Thus it appears that these so-called "masochistic" females, far from seeking or resigning themselves to physical pain, flee from it. Men, on the contrary, appear to be the ones who typically are expected to submit to bodily pain without argument or complaint. From their earliest experiences with athletics, boys are trained never to cry. In many cultures adolescent males are required to endure painful rites of passage at puberty. "Aside from actual physical pain, men are submitted to humiliation, and are expected to respond with silent acquiescence or even with ingratiating behavior, in such primarily masculine establishments as the armed forces and business corporations" (Fried, 1971, p. 40). Only the top men are allowed the luxury of uncensored expression.

In short, the attributes designated as characteristic of a masochistic personality--that is, the repression of aggressiveness and the willingness to serve a cause with abnegation, to obtain something which is valued--can be applied with discretion to either sex. To a female the purpose of the suffering has typically been to achieve love (Deutsch, 1944). It seems as though these same qualities can describe a male, with his end goal possibly financial gain and prestige. The personality traits required to achieve the goals,

though, are parallel. Further, in today's society women are expanding their realm of activity, and their goals are concomitantly becoming more expansive (Bardwick, 1971; Chesler, 1972; Luria, 1974). Men, too, are seen as equally desirous of love and relationships (Hunt, 1973; Lockhart, 1974). The question of which sex is more masochistic is possibly linked to the social context being considered. The point that we are trying to make, succinctly stated, is that the traits of masochism and Icarianism may or may not be sex-linked.

The question still remains, if masochism and Icarianism can describe either sex, why are these concepts reputed by May and others to distinguish the sexes on fantasy stories? To pursue this question, we need look first at May's work and that of others replicating his. Personality factors that might be affecting the results in addition to, or instead of gender, should next be considered.

May's Research and Related Studies

May has proposed a method for measuring sex-role identification in which the fantasy patterns of males and females were found to differ. He gave Harvard and Radcliffe students a picture of a trapeze scene, with a muscular male swinging from a bar, holding a female in mid-air. This picture was chosen because he expected it "to pull rather direct and dramatic stories of rising and falling" (1966, p. 580). A scoring system was developed on the basis of this picture.

The scoring system. May uses two general categories for scoring, deprivation (D) and enhancement (E). Deprivation refers to mention of failure, struggle, effort, tension, sadness, misfortune, death, etc. Enhancement includes references to success, skill, happiness, fame, virtue, etc. Subjects were asked to write a story about the trapeze picture, beginning with the past events and leading to predictions. The dramatic turning point of the story is called the pivotal incident (P.I.). Units of D and E are scored according to their position before ($D = +1$, $E = -1$) or after ($D = -1$, $E = +1$) the P.I. The predicted pattern for a female is a DE story, with a positive score. Thus, following or resulting from suffering or unhappiness, a turning point is reached and events turn out all right in the end. An ED story, with a negative score, is expected for a male. The male's pattern is the reverse of the female pattern. The following excerpt from stories illustrate the respective patterns. The first was written by a female and shows the expected positive shift.

These two acrobats are attempting a very difficult feat (D, +1) and they're very apprehensive (D, +1). But they have rehearsed this trick many times (D, work, +1) and in spite of their fear they must try even if they must both be killed (P.I.). They survive (E, +1). score = +4

A male wrote the next story, and the sequence is from positive to negative (ED).

The scene is the Ringling Brothers Circus (E, success, -1). The two people performing are very involved outside of their job--a love affair (E, -1). They are well-known, performers (E, -1). The second man is about to lose his grasp on the trapeze (P.I.) and the two of them are about to fall (D, -1) to their deaths (D, -1). score = -5 (p. 580)

These stories are extreme and stereotyped: most demonstrate intermediate patterns, with relative shifts from D to E or E to D.

Initial research validating the hypothesis. In his original study (1966) May's subjects were 104 undergraduates from an urban coed university, an engineering college, and a private women's college. They were drawn from psychology courses, and while not initially volunteering or being reimbursed, only one or two refused to participate. The subjects were instructed to write "dramatic, creative and psychologically insightful" stories to four TAT pictures presented in a fixed order (1966, p. 580). The first picture was the same trapeze scene on which the scoring system was developed. The second showed a bullfight scene, the third a dejected couple sitting, and the last, a child scene.

The results were in the predicted directions. The stories told by females began with themes of suffering and struggling, and ended on a positive, successful note; the men's stories had a reversed pattern. The difference between the combined male and female means was significant beyond the .005 level. Comparing the number of positive (deprivation

followed by enhancement) and negative scores for each sex, it was found that about 2/3 of the subjects showed the predicted pattern; not explored were distinguishing characteristics of the deviating third of the sample. Regardless, all but the last picture illustrated the expected sequence, the first two most notably. Anticipating other variables which might underlie differences, May analyzed his data in terms of length of stories and numbers of deprivation units. On only one picture did a female write a longer story; on another a female used more deprivation units. Only the former difference was statistically significant. Differences in responses to the trapeze picture were largely accounted for by D/E difference scores. The means on this picture were -0.714 for males, +0.787 for females. May concluded that women see "deprivation, or shifts away from conscious ego control as ultimately beneficial, while the male is more likely to see them as 'lapses', or as leading to catastrophe . . ." (p. 585).

In a follow-up study, May (1969) varied his procedure by using older subjects, all volunteers and only half of them students, and by administering the TAT individually. Only one stimulus picture was used, the trapeze card, from which the scoring system evolved. Subjects were also asked to complete the Gough masculinity-femininity (MF) scale (Gough, 1952) and given a structured interview exploring their early and present sex-role expectations and identity.

Results again confirmed the predicted sex difference in

fantasy patterns. The mean D/E scores are +0.89 for women and -2.25 for men, yielding a t value of +1.98 ($p < .05$, one-tailed). The correlates of the D/E fantasy pattern were interesting. Age, intelligence and social class were not related. However, male scores on Gough's masculinity ratings and male subjects' sex role satisfaction as judged by the interviews were significantly correlated. The "tough guy" on the Gough scale and the male with sex role dissatisfaction were both associated with a more masculine fantasy pattern (ED), seeing "life as a series of ultimately unsuccessful strivings or doomed exertions" (May, 1969, p. 465). The patterns for women showed no similarity to these.

Thematic differences of highly "feminine" females and "masculine" men. The next question May pursued with regard to the interviews was the thematic differences found in the protocols of the three lowest or "masculine" scoring males compared to the three highest scoring. The hunches developed from these extreme scorers were then applied to the total sample. Most of the men with more "masculine" scores had 1) an ideal image of a man as aggressive and competent, 2) a sense of past inadequacy and present pressures, and 3) some envy of what they perceive as woman's ability to be more relaxed, dependent and acquiescently human. In contrast, those men with less "masculine" scores spoke of being alone, vulnerable, strained, and somewhat separated from their peers as children. Only one male below the mean reported this sense

of isolation.

The situation was less clear for women. Themes that distinguished the high DE or "feminine" female from the low DE female were as follows: 1) Reports of maternal expectations for them to conform to a stereotyped definition of the female role ("being nice") which the daughter resented. This does not include sexual mores but rather politeness, gentility, and a pleasant manner. 2) A dislike of the expected passivity and obedience to the whims of men. This stifling of their initiative and assertion was found to be a most important characteristic for these high feminine females. 3) An envy or imitation of men, stated openly or in recollection of being a "tomboy". They recalled being aggressive until forced by social pressure to become more "feminine" (May, 1969). Similar to the male pattern, childhood isolation was associated with a strong DE pattern in women. "Six out of the eleven women above the mean report such isolation, while none of the women below the mean does" (p. 468).

In sum, the clearest patterns come from people "who sense a strain in being a man or woman, and who have come by their conception of their own masculinity-femininity in a more tortuous way than most" (May, 1969, p. 468). Crucial factors, then, are their sex-role tensions and their youthful lack of experiences with peers (Sullivan, 1953). Thus, a boy or girl, "in the absence of a close human sense of the same dilemmas existing in another, resigns himself to the unplea-

sant task of living up to an ideal image of male striving or female gentility" (May, 1969, p. 468). The deprivation/enhancement (D/E) fantasy patterns, both between and among men and women, lend credence to Murray's (1955) ideas about the male "Icarus complex" and Deutsch's (1944) about "feminine masochism."

Developmental differences. May's next heuristic question (1971) was: "At what age do children differ in patterns of dramatic fantasy?" The trapeze picture and another scene were given to third, fourth and fifth graders. As in the preceding studies, girls told stories of deprivation (sadness, injury, failure, and struggle) followed by enhancement (happiness, success, friendship, and eminence). Boys generally told stories with the opposite pattern. There were significant sex differences in the predicted direction for both pictures. For the trapeze scene, the mean for boys was +0.19 and for girls, +1.54 ($t = 1.995$, $p < .05$, one-tailed).

In a replication of this study, Cramer and Bryson (1973) confirmed May's results that sex-related fantasy patterns existed in older grade-school children ($N=41$). However, younger boys and girls, about age five, did not differ in patterns of fantasy ($N=48$). The one exception to this was the third picture presented, our familiar trapeze card. The obvious question this raises is whether there are specific stimulus qualities in this card that elicit different types of stories by males and females, a question which will be pursued at length later. In general, though, fantasy patterns do not

distinguish the gender of young children, but by adolescence (between 9 and 12 years of age), sexual differentiation is clearly evident.

Cramer and Bryson's most interesting finding is that while the male's fantasy pattern remained stable, it is the female adolescent who changes. By the age of 9 her stories resemble an adult female's. Another study reported by May (1974) has shown similar results. Saunders (1971) found a definite age progression in D/E scores for the girls, showing an increase in the strength of the female (DE) pattern. These findings parallel those of Brown's (1957) on sex-role preferences. Regardless of gender, kindergarten children preferred masculine roles, but by the fifth-grade the girls showed a dramatic increase in feminine preferences. Once again, the boys' scores were stable through these years. Boys may be more Icarian in the first place, or girls may be pressured, relatively speaking, to become more willing to be patient or to endure suffering in hopes of future rewards. These findings can be used to support two explanations, socialization (e.g. Maccoby, 1966) or physical-biological differences, such as on the onset of puberty (e.g. Deutsch, 1944).

A homosexual variable. Since D/E patterns are an expression of sex-role identification, one might expect that sexual orientation would be a relevant variable. Homosexuality, a major shift in sexual identity, was predicted by May

(1974) to influence D/E patterns. The trapeze card was given to fourteen young homosexual men beginning treatment at university health services. "The mean D/E score for this group was +0.714 (SD = 2.05), the most positive or "feminine" score of any male group tested so far" (p. 7). This pattern was most noticeable when the hero or central figure of the story was female. These results suggest a more traditionally feminine identity in the adult fantasy of homosexual men.

A pathology variable. Another variable of interest in the study of sex-role orientation is pathology. May (1969) looked at the effect of acute schizophrenia on D/E patterns in response to the trapeze picture. A small group of recently hospitalized, young patients were the subjects. Their stories were recorded and transcribed, a procedure differing from earlier studies. Mean D/E scores were -1.529 for men (SD = 1.97) and -0.200 (SD = 2.83) for women ($t = 1.913$, $p < .05$). "The sex difference was thus a relative rather than an absolute one with this group, since the women were slightly on the negative side" (p. 3). In comparison with the scores of a matched group of non-patients (presented in May, 1969), the scores of the schizophrenics show a lessened, but nonetheless present, D/E phenomenon. No significant correlations were found between the D/E scores and either the Gough masculinity-femininity scale or interview rating of sex-role discontent. As in prior studies, factors of age, intelligence, and social class were not relevant.

A group of inpatients with a wide variety of pathology and length of hospitalization were the subjects of another study (May, 1974). During the patients' routine testing, they were asked to respond to the trapeze card at the end of the standard (Rapaport et al., 1945) TAT. Major predictions were made about the relationship between D/E scores and character types, field dependence and independence, and sexual identity. Results show that sex-role orientations are blurred in this group, and the D/E scores on the trapeze picture yielded marginal sex differences.

Most interesting were May's results concerning character types. Since "hysterical" character traits are thought to correspond to an exaggeration of the stereotyped female role--"emotionality, seductiveness, dependence, a disinclination for 'rational' thinking, and a combination of seeming helplessness with impressive interpersonal skills and impact" (1969 , p. 9)--May predicted that patients diagnosed "hysterical" would have more positive (deprivation leading to enhancement) D/E scores. Likewise, "obsessive-compulsive" patients would have more negative scores, since this diagnosis is an extreme example of the male "instrumental" role. Rationality, competence, impersonal objectivity, self-control, and power were the traits emphasized (May, 1974).

This prediction was confirmed for the women, those labelled "hysterical" having significantly more positive or feminine scores. Since only two men were diagnosed as hys-

terical, there is no statistical difference between their scores and the obsessive-compulsive men. The means, however, were in the predicted direction. Still, the scores of the male hysterics did not approach the female hysterics' scores, but were more positive than the scores of the female obsessive-compulsives. The latter group had more masculine or negative scores than their male counterparts did. The possibility exists that these "hysterical" women share with the high-scoring females of May's first study "a disgruntled sense of enforced passivity, patience and politeness" (p. 16). While they perceive themselves as being reactors to and victims of other people's actions, their hysterical outbursts in actuality function to control others. Not surprising according to May's theorizing, the women with a "masculine" abnormality, obsessive-compulsiveness, also have a "masculine" fantasy pattern. Little can be said about the D/E scores for the men, since with the exception of the nonparanoid psychotics, all the means were similar. It seems that neither pathology nor diagnostic label affects males' fantasy patterns on the dimensions of deprivation/enhancement (or masochism--Icarianism).

What does seem to affect D/E scores is the intensification of sex differences by those identifying with the stereotypic image for their gender. May found this to be true when he interviewed the subjects at the extremes (1969). Also, the group of men with homosexual tendencies and experiences

showed a more "feminine" fantasy pattern than predominantly heterosexual men. As additional evidence, Winter (1969), using May's techniques, found that the act of nursing a child strengthens the female pattern. The stories told by women while breast-feeding their children were more feminine or positive than those told by mothers who were not nursing when they took the TAT ($N=24$, $p<.01$ for the only card used, the trapeze scene). Perhaps the strongest support for May's finding of sex differences in fantasy patterns comes from Bramante's extensive study (1970). In addition to replicating May's original research, Bramante investigated what happens to the fantasy patterns under conditions where the subjects' masculinity or femininity is enhanced.

Bramante's study. The manipulation used by Bramante (1970) to increase sex-role identity was a movie of a loving sexual relationship, in which the subjects could identify with the characters. In addition to the TAT, a questionnaire he devised (an MF scale) was given to ascertain how masculine or feminine the Ss consciously felt themselves to be.

Bramante's results supported May's findings. The male and female patterns were significantly different. The men revealed a characteristic fantasy pattern of relative enhancement followed by relative deprivation, and the women's moved from deprivation to enhancement. The treatment condition, viewing the love story, also notably increased sex differences in fantasy scores. Bramante noted that there was a

"highly significant difference between pictures which points to the presence of specific picture effects" (p. 40).

Still, regardless of picture, the differences between groups were consistently due to the differences in treatment conditions. As predicted, the fantasy patterns were intensified for both men and women after viewing the love story. The "difference between the male and female means in the experimental group is over two and one half times the size of the difference between the two control group means" (p. 44).

This difference is even more pronounced when only the Ss at the extremes are considered, that is, the Ss in the highest and lowest quartiles of the D/E scores for each of the four groups.

Bramante's next question concerned the relationship between the Ss relatively conscious appraisal of how masculine or feminine they felt and their fantasy pattern. For the females there was no correlation between the fantasy pattern and the MF scale scores; for the males in the control group a small but positive correlation existed. The males given the experimental treatment showed a trend towards reversal. After viewing the love story, the men who saw themselves as more feminine on the MF scale wrote the more masculine stories, and vice versa ($p < .001$). It appeared that the reversal was produced mainly by the reaction of the high-feminine males. Bramante suggests that the more "feminine" men "allowed themselves to give in to the feelings aroused and

. . . experience their more or less submerged masculine longings and strivings This brings in tow intense castration anxiety which is more usually defended against by the maintenance of the passive facade" (p. 63). After the experimental treatment the females' fantasy pattern scores were significantly more positive and the men's more negative, in line with the hypothesis. The intensification was found to consist of a relatively greater emphasis on deprivation in the latter portion of the men's stories. For the females the degree of intensification appeared to be unrelated to the feminine self-concept as measured by the MF scale. For the males the degree of intensification seemed to be inversely related to their masculine self-concept.

Given his results, it is not surprising that Bramante reiterates the theoretical framework put forth by May. That is, that male and female modes are basically rooted in innate differences and fostered by cultural pressures since they represent the two sides of an adaptive and complementary division of function. His female subjects feared displeasing or losing a protective "other" upon whom they could rely, though they expected there would always be an "other." They seemed willing to give in or give up conscious ego control in order to be loved or valued by someone else. Being loved was usually anticipated or achieved in the women's stories. Contingent with being loved were feelings of dependency and a passive stance. Bramante described "masochism" in these terms

of interpersonal passivity rather than a wish to be hurt. "The masochistic element in the women's stories appears to be largely the result of the necessity to depend upon, and to protect a powerful and idealized 'other' all too often, it would seem, at the expense of one's own genuine autonomy" (1970, p. 57). It is noteworthy that his definition is looser than May's, being less focused on abuse and physical suffering.

There is no question that this pattern of expectations and fears imposes limits on a female's behavior. Still, Bramante speculates, there are advantages. First, they have the freedom to enjoy passivity. Secondly, because of their greater capacity for identification, they can identify with men and vicariously enjoy masculinity. Thirdly, their relative acceptance of merger may result in a greater capacity for empathy. Lastly, according to the author, women can use their capacity to tolerate in their role as mothering agents. If these are advantages perceived by women for fulfilling their expected sex-role functions, they are not demonstrated, nor disproved, by the data Bramante collected. Additional studies to test these speculative ideas are clearly needed.

The male fantasy pattern seen in Bramante's subjects suggests that for men any giving up or loss of control has overtones of finality. Not only do achievement and success increase the fear of falling or of loss of control, but op-

portunity does, for it represents a test of the man's capacity to maintain ascendancy over the environment. This was Bramante's interpretation of the finding that after viewing the love story, males wrote stories with more "deprivation" in the latter portion, though the first part of the fantasy was not affected.

The fact that the males did not wish to lose control was interpreted from an analytic viewpoint. That is, they feared losing their hard-earned separation from their mothers. Giving up ego control suggests that: 1) a man may be overwhelmed by internal needs and wishes for symbiosis, and 2) control will be in the hands of others and he may be dependent. Not only do social pressures push a man to give up the remnants of his symbiotic longings, but so do his internal strivings, with the deciding factor being the fact that his genital apparatus encourages the intrusive mode. Being intrusive, which translates into being assertive or aggressive, means being vulnerable to chastisement, fear of which is symbolically described as castration anxiety. The fears noted among Bramante's male Ss, as well as May's centered on the

intensity of the pattern which directly related to the level of castration anxiety. The pattern reflects not masculinity in the sense of assertiveness or drive, so much as it reflects the characteristic male fear of having these fail (pp. 61-62).

One way to avoid these fears and internal pressures is to be more "masculine," to strive for achievements and engage in power struggles. Another way is to inhibit these strivings and develop a "passive" facade. The results supported this notion. The most masculine stories were written by men who reported high castration anxiety on the MF scale. The least masculine stories were typically written by men with reported low castration anxiety. Thus it appears that some "passive" men may inhibit their assertive wishes, along with the anxiety connected with them, but cannot give up their strivings, evidenced by their very "masculine" fantasy patterns.

Interestingly, it was clear that this inhibition of aggression in males was quite different from the passivity of women. "It appears to be the result of different expectations and fears and to have a different dynamic basis. The fantasy patterns of the most "feminine" men, as measured by the scale, are the ones that show the greatest difference from the female pattern" (p. 64). Bramante hypothesizes that the typical female pattern revolves around a core of separation anxiety, while male concerns typically involve castration anxiety and the fear of merger. The existence of "feminine masochism" is supported by the results." "Penis-envy" was not pertinent to the women. For men, the crucial factor seemed to be "castration anxiety."

Clearly both males and females pay a price for the kind

of sexual differentiation demanded in our society. "The degree to which fear of aloneness and the fear of loss of autonomy or power are divided between the sexes would seem to reflect the differential treatment accorded children of each sex. There is no evidence that such a division is biologically necessary or socially inevitable" (pp. 65-66). Bramante raises the question "as to whether the sacrifice of inner potential, to the degree suggested by both male and female patterns, might not be beyond what is required by the necessities of the body or the genuine needs of the society" (p. 65).

All of the preceding studies supported the basic pattern differences between men and women postulated by May. Invariably those with confused sexual identity had fantasy scores toward the extremes. Others who diverged from the norm of their respective sex on the D/E score were those who had heightened identification with their sex-role, either by natural means (as in nursing) or by experimental manipulation (viewing a love story). Only one study in the literature criticizes May's theoretical foundation and methodology.

Fried's critique. Fried (1970) is critical of May's hypothesis of sex differences in fantasy on both conceptual and methodological grounds. He begins by pointing out the irony in May's vouching to right the "inadequate, reactionary . . . conception of women" (May, 1966, p. 576) propagated by the social sciences, and then turning to Freud's works for

an explanation, although Freud's understanding of women has been widely criticized for being inadequate and reactionary. Fried cites the differences between May's view of Icarianism and the Icarus complex described by Murray. Because the two are so dissimilar, he suggests May would be better talking about a pattern of ascension followed by descension, rather than relating this to Icarianism. Fried asserts that in his clinical experience, those Icarians who adhered closely to a "tough guy" image in overt behavior, and who earned high scores on masculinity tests, were likely to repress their most classically Icarian fantasies. Similarly, those with low scores of masculinity, and who acted in an "arty," sensitive, or even effeminate manner were more clearly Icarian. "The Icarian may sometimes act like a 'tough guy' but the 'tough guy' is not typically an Icarian" (Fried, 1970, p. 42) rather, he has, and is aware of, a pronounced bisexual element in his personality. These observations of Fried's were actual findings of Bramante (1970).

Fried's third criticism of May's work centered on the DE/ED scoring system. He felt that, while it may, in fact, suggest pattern differences for each sex, it is doubtful that these patterns could be extended to imply a masochistic or Icarian character. To test this idea, he chose subjects from extensive case files on the basis of their personality types. Thus, he chose twelve each Icarian males, non-Icarian males, and sado-masochistic females. While several of

Fried's arguments are sound, he errs by equating May's term "feminine masochism" with "sado-masochism," a general term including all forms of pleasure from punishment perverse and otherwise. Further, he failed to replicate May's results, finding instead that most subjects had positive or feminine patterns. Fried failed, however, to use May's scoring system, creating his own categories and adding weights instead. This lack certainly casts grave doubts on the reliability of his findings. Rather than focusing on units of "deprivation" or "enhancement," Fried was more concerned with looking at the content of the stories--did they have sadomasochistic overtones or Icarian themes? It is not surprising that May, in reviewing Fried's work, concludes that it is "a deprivation rather than an enhancement" (May, 1971, p. 421).

The above criticism notwithstanding, Fried does raise an interesting question about stimulus effects. That is, whether sex differences in fantasy patterns are elicited or imposed by the pictures presented. May's thesis is that patterns are elicited, i.e., women begin their stories on a note of "deprivation" and move to "enhancement," and men proceed in the reverse order. Fried's hypothesis is that May's pictures impose a pattern, since most of his are Icarian pictures (e.g., the trapeze scene). These magnified "a sex difference by compelling concern with themes of danger and depression, and obscured the difference between Icarian and non-Icarian Ss by compelling concern with Icarian themes"

(Fried, 1970, p. 53). Fried suggests that the stimulus qualities should be carefully and systematically varied.

The stimulus. Without question features of TAT pictures need to be analyzed to determine how they effect responses (Leiman and Epstein, 1961; Murstein, 1963; Vernon, 1964; Terhune, 1969). In several studies, differences in stimulus structure proved to have a greater effect on the emotional tone of stories and on motivation scores than sex differences (Eron, Terry, and Callahan, 1950; Sarason and Sarason, 1958; Murstein, 1959, 1968; Kagan, 1959; Atkinson, 1965; Goldfried and Zax, 1965; Weisskopf-Joelson and McDaniel, 1970). In the words of some of the leading researchers, "the differences between the stimulus properties of the cards seems to outweigh all other determinants of the thematic response" (Murstein, 1968, p. 363). In particular, " . . . cards differ more among themselves for either sex than they do between sexes (Eron, Terry, and Callahan, 1950, p. 477). The suggestion offered by some researchers is to look at scores for each picture separately, and not pool the results. Comprehensive studies of one card have been informative (Hunt and Smith, 1966; Winter, 1969; Hartman and Nicolay, 1971; Mundy, 1971).

One way in which the importance of the stimulus has been explored was by varying the central figure (see Murray, 1965 or Vernon, 1964). To this end the socioeconomic class, the weight, the color, the age, and the sex of the main figure

has been systematically changed. One finding is that too close identification with the central character reduces the degree of projection. Another general finding is that women, like Blacks, project more need achievement to figures of white middle-class men (Veroff, Wilcox and Atkinson, 1953; Veroff, 1961; Murstein; Cowan and Goldberg, 1967; Weisskopf-Joelson, Zimmerman, and McDaniel, 1970; Tidrick, 1973). However, when female students were classified into "achievers" and "nonachievers," achieving high school girls projected more achievement to pictures of females. Scores of under-achieving girls increased when given male pictures (Lesser, Krawitz and Packer, 1963). The authors suggest that the achieving girls value intellectual attainment for themselves more than the underachievers do, and thus identify with the women figures, while the lower achievers more traditionally identified with male figures. This result was similarly found by French and Lesser (1964) and Botha (1971).

In light of these considerations, it is worthwhile to consider the "picture pull" of the trapeze scene used by May. The scene shows a male trapeze performer swinging in mid-air, his feet bent around a bar. His hands hold the wrists of a female trapeze artist, her only support. It can be expected that the stories by men and women would differ due to the positions of their respective same sex person (Alper and Greenberger, 1967). In order to discover if the patterns found distinguishing the sexes on this trapeze scene were indeed

generalizable and not solely dependent on the presented stimulus, the author had the picture redrawn.* The new picture is a mirror-image of the original scene, with the characters reversed, that is, with the female as supporter and the man in mid-air.

We can speculate on what the effect will be of changing the picture. A male subject looking at the original scene sees a man placed in a responsible position; it is his duty to hold up a woman. Weakness on his part would result in her falling. Trepidation over this is reflected in the trajectory of their stories, which typically move from feelings of enhancement, control, power, to failure, loss, grief. In the experimental picture, the male is hanging in mid-air. His safety depends upon a female. We can speculate that rather than tell a story beginning with success and ending sadly, the males given this new inversed scene might begin with concern, and conclude with increased confidence--on an upbeat, or perhaps, with calamity. Either way, there scores on the D/E measure should be less negative, or less "masculine".

Because surveys show conflicting evidence as to whom a female will identify with (see Murstein, 1965), we do not know what the effect will be when reversing the sex of the main characters. Females observing the original scene see the woman trapeze performer in a dependent position, literal-

*Thanks are given to Mary Sullivan for suggesting this possibility, and to Cathryn Tolsdorf for her help in redrawing the pictures.

ly "hanging on to a man." In the past, their stories reflected a movement from sadness, struggle, effort, to success, skill, happiness. In the revised scene, the female artist is in control of the man's safety. Female subjects may still identify with the figure of the dependent character --in this case the male trapeze artist--and their stories reflect the same D/E scores. Or, some female subjects may identify with their same sex figure. It is reasonable to suspect that females identifying with the woman might worry that they cannot support the man. If they are successful, they could show more "feminine" scores, if they fail, more masculine scores might result. To replicate past story patterns, the female must either project more effort, determination, and worry before the positive outcome, or else write about the male suffering in the beginning of the story, ending on a positive note. If they do not follow either pattern, then the scores will not be as high or "feminine" as in the control group. We might speculate that the average of the female experimental scores will be as high as in the control group, or possibly more positive given the options.

Another possibility is that a woman or male subject may see the female in the superior position in the revised scene, and reject the stimulus altogether as "unbelievable" (as happened in Horner's study, 1972). To summarize our major expectation, we derive

HYPOTHESIS 1: Responses to the trapeze scene similar to that previously used by May will replicate the sex difference May found (1966) in fantasy patterns. Specifically, female stories will progress from deprivation to enhancement, and male stories will show a reversed pattern.

HYPOTHESIS 2: Responses to the mirror-image of the original trapeze picture will not show the same degree of difference between men and women on D/E scores as in the control condition--rather, given the pull of the picture, we might expect both sexes to score more femininely.

Personality Variables

In addition to exploring the effect of the stimulus properties between the sexes, we intend to investigate some variables that seem to distinguish the pattern variation within and between the sexes. The question to be considered is whether there are personality variables that might account for the differences in story sequence that May found between his male and female subjects. Reviewing May's 1969 study, the central theme that seemed to distinguish high ED (masculine) from low ED men was a need to prove oneself and to be competent and in control, rather than to be passive, dependent, or effeminate. The women with the highest DE (feminine) scores showed not a striving for gentility and passivity, but rather a grudging acceptance of these characteristics. This pattern lacked the clarity of the distinguishing theme for males,

however. Trying to simplify these themes into traits that could be easily measured, needs for achievement and dominance seem most relevant in clarifying trends among the men. These traits are usually considered masculine by societal standards (Terman and Miles, 1936; Mead, 1949; Brown, 1957; Rosenkrantz et al., 1968; Bem, 1972), so we can speculate that they will not only be useful in describing male ED patterns, but also helpful in distinguishing between the sexes. To this end we also decided to measure the subjects' need for affiliation, which is a motive usually descriptive of females (e.g., Atkinson, 1957; Bardwick, 1971; Fitzgerald and Pasework, 1971; Scott and Johnson, 1972). Other traits of interest are excluded due to a dearth of systematic testing. These sex-role associated traits may be a function of the degree to which an individual has a masculine or feminine orientation, independent of their biological sex (Shemberg and Leventhal, 1968). To pursue this question, we will consider if patterns of extreme scores are primarily a result of the personality traits or the sex of the respondent.

Measurement. As mentioned, a substantial body of literature exists on the needs for achievement, dominance, and affiliation. Measures of these needs are frequently derived from responses to Thematic Apperception Tests (e.g., Atkinson, 1957, 1965; Veroff et al., 1960; Murstein, 1963, 1965). Unfortunately, a review of the research reveals varying definitions of the needs or motives, and discrepancies between

measures. This raises serious misgivings about the feasibility of comparing results, which are considered in the following discussion of definitions and measures.

To illustrate the problems encountered, let us consider need achievement scores. McClelland (1958) defines achievement as a disposition to strive for success in any situation where standards of excellence exist (see pp. 7-42). The Crandalls believe this definition to be too general, and they urge researchers to use a more specific one referring to achievement behaviors. They use three criteria: the inferred goal, the unique characteristic, and the nature of the situations in which the behavior occurred (Crandall et al., 1960, p. 789; also Stein, Pohly, and Mueller, 1971). Other investigators (McClelland, 1951, 1958; Atkinson, 1957; Veroff and Veroff, 1972) find that a fear of failure is attendant with striving for success, and therefore suggest that this be included in the measurement. Still others argue that traditional feminine-role accomplishments should be included under the rubric of achievement. When the context of achievement is expanded to include success in personal goals, women are found to exhibit similarly high achievement scores (French and Lesser, 1964; Shemberg and Leventhal, 1968; Maccoby; 1966; Bardwick, 1971). Too frequently the female's desire to be married, have children, and be a good homemaker, are confused with a need for affiliation, rather than an interaction or fusion of affiliation needs with achievement needs. The

reverse has also been suggested, that is, that many males demonstrate achieving behaviors but are motivated by affiliative needs. The possibility exists that their motive may not be an internal need for achievement but rather a desire to receive praise from others (Crandall et al., 1960; Douvan and Adelson, 1966). Given these varying assumptions about what a need for achievement is, the implication is that the viability of achievement needs as a theoretical construct is questionable.

Another problem which comes to the forefront when trying to compare studies on achievement needs is the variability of measuring scales. Some experimenters initially note if there is mention of achievement imagery. If present, they proceed to score for further breakdowns of the achievement motive. The number of further decisions to be made can vary from three to eleven (Atkinson, 1958; Rosenfeld and Franklin, 1966; Terhune, 1969). Others argue that all that is necessary is to score one point for each story if the motive is mentioned (Entwistle, 1972). In a careful review of the reliability of various scoring techniques, Entwistle (1972) concludes that there is little difference between the two techniques cited, the full-scale and the dichotomous scoring scheme. Other problems encountered in trying to compare studies is that there is variation in the sample size, the method of administration, and the specific TAT cards used

(Rodgers, 1973). Lacking test homogeneity, it is no wonder that the average reliability estimate for fantasy-based measures is low, about .30 (Entwistle, 1972). Another thorn in the achievement motivation literature is the persistent sex difference. While reliability is generally low, it is worse for females than males. In Entwistle's words, there is a "puzzling failure to find 'meaningful' relationships for women when they are found for men" (1972, p. 389).

The factors cited which confuse the comparison of studies on achievement motivation are not unique to that need. Similar problems exist when measuring the needs for dominance (Veroff, 1958; Uleman, 1967, 1972) and affiliation (McClelland, 1951; Atkinson, 1957; Crandall, Katkovsky and Preston, 1960) from projective tests. Traditionally, thematic apperception measures of dominance motivation (Atkinson, 1958) looked at the desire for power in terms of influence and control. A comprehensive review of research suggests that it largely reflects a person's fear of weakness (Veroff and Veroff, 1972). In studies of affiliation, the need can be aroused through sociometric ratings emphasizing fear of rejection rather than acceptance (Shipley and Veroff, 1952; Atkinson, Heyns and Veroff, 1954; French and Chadwick, 1956; Rosenfeld and Franklin, 1966). Defining these needs, then, is as complicated as defining achievement.

Also confusing are the measurements. Uleman (1967) criticized the traditional method of scoring dominance used by

Veroff (1958) and devised his own. The two measures of the need for power were independent, and did not correlate significantly. Once again, little note is made of sex differences. Rosenfeld and Franklin (1966) point out that females have been neglected in research on affiliation motivation.

Given the problems with measuring achievement, dominance, and affiliation needs from projective tests, we decided to focus on those studies using self-reported measures of these needs. Objective tests of needs are also not free of criticisms. One major problem is that they seem to correlate negligibly with one another. Also, subjects may not be able to talk of their motivational states. Further, objective tests have been shown to be highly susceptible to "faking" (Entwistle, 1972). Still, they are fairly reliable, and thus for our purpose the preferred instruments to use. In the remainder of this section, we will survey the studies from recent years which measured the three variables--achievement, dominance, and affiliation--by means of self-report tests.

Achievement variable. A series of studies have recently been performed by a group of researchers concerned with sex-role stereotypes (Rosenkrantz, Bee, Vogel, Broverman, and Broverman, 1968; Lunneborg, 1970, 1972; Bem, 1972). They proposed their own measures, first assessing individual perceptions of "typical" masculine and feminine behaviors (Rosenkrantz et al., 1968; Lunneborg, 1970, using Edwards Personality Inventory). They found that certain personality

traits linked to achievement behaviors (e.g., assertiveness, independence, competitiveness, and feelings of competence) were generally not associated with women, although highly valued by them. The masculine poles of the various items were considered to be more socially desirable than the female poles, except for attributes of warmth and expressiveness (Broverman et al., 1972). Given the above, it is not surprising that some women who achieve in masculine areas appear to identify with the masculine role as well as the feminine role (Ferguson and Maccoby, 1966; Bardwick, 1971). That is, achieving women could still be found to exhibit stereotypically feminine characteristics. This was the finding of the experimenters who measured masculinity and femininity as two dimensions rather than opposite poles of one dimension. Their results showed small correlations existing between a Masculinity Scale and a Femininity Scale (Maccoby, 1966; Lunneborg, 1970, 1972; Stein, 1971; Stein, Pohly and Mueller, 1971; Suter, 1971; Bem, 1972). This type of research suggests that sex-role orientation is not a unidimensional concept, and that people can have self-perceptions that "include attributes associated with both sex roles rather than being restricted to one" (Stein and Bailey, 1972, p. 352).

Integrating achievement strivings and the traditional feminine role creates conflicts for many women, and with the conflicts a variety of solutions. Frequently females gratify their achievement needs by choosing a feminine occupation

(e.g., teaching or nursing), which avoids some sex-role conflicts. Trying to combine both--by striving in a career while manifesting feminine behaviors--is another way of working out the difficulty. Other women overcompensate by being both career-oriented and devoted to the feminine role; they are commonly known as Superwomen. Other solutions demand even more compromise. Two ways of coping with the conflict produced by public accomplishment in competitive situations are to conceal achievement (Horner, 1972) or reduce one's effort (Weiss, 1962).

Horner compared the scores of 60 female subjects on achievement tasks in a large mixed-sex competitive situation, then a strictly noncompetitive situation. Those females with high fear of success, as measured from the content of their TAT stories, performed at a lower level in the competitive situation, reducing their capabilities. Weiss, using the Terman-Miles M-F test, examined the sex role identification of 30 college women. Subjects were asked to compare their strengths with a hand dynamometer. Results showed that after "beating" a male, the women showed less strength on the next task with a female. The author reports that although the subjects tended to depress their scores in the presence of a male partner, they did so without conviction. Scores on the task did not correlate with the M-F scores. Another finding is that women can find vicarious satisfaction for their

achievement needs (French and Lesser, 1964). Lipman-Blumen (1972) asked a sample of 1012 college-educated, married women if they preferred to satisfy their achievement needs either completely or predominantly through the accomplishments of their husband, through their own efforts, or both equally. Two-thirds of the sample considered their husbands' accomplishments more gratifying. The crucial point to keep in mind is that there are no conflict-free solutions for females with strong achievement orientations, whereas men know they will be highly rewarded for channelling their energies into career goals (Nawas, 1971).

Many of the patterns discussed occur gradually over the years. Adolescence has been considered a particularly important time for females because this is a critical time for them to consider and change the direction of their achieving (Kagan and Moss, 1962; Bardwick, 1971). Torn between pursuing academic accomplishments or heterosexual popularity, their future goals become unclear and unrealistic (e.g., to become a movie star) (Douvan and Adelson, 1966). The ambivalence over goals may become even more pronounced towards the end of their college years, when social pressure bears down on the female to marry (Horner, 1972). Studies of women in these years suggest that they are more anxious about failure, more cautious in risking failure, and more likely to assume responsibility for failing when it occurs than is the case for males (Veroff, 1969; Stein, 1971; Stein and Bailey,

1972).

One reason offered to explain women's lower expectancies is that the stereotypic female is seen as less competent than a male (Rosenkrantz et al., 1968; Broverman et al., 1970; Lunneborg, 1970). This was true when judges evaluated professional articles (Goldberg, 1968) and vitae of psychologists applying for faculty jobs (Fidell, 1970), where everything was held constant except for the sex of the artist or applicant. When paintings were labelled as prize winners, the sex bias was neutralized (Peterson, Kiesler and Goldberg, 1971). "Even when females are perceived as performing competently, their performance is more likely to be attributed to luck as opposed to skill than that of males. This difference is particularly apparent when performance on a masculine task is rated" (Stein and Bailey, 1972, p. 355).

Studies from the last few years suggest that females are becoming more achievement-oriented (Bardwick, 1971; Luria, 1974) and males less so (Horner, 1972). Luria followed a group of females graduating college in 1967. In order to assess the personalities, backgrounds, and attitudes towards employment of their 248 subjects, Luria and Mowbray used the California Psychological Inventory, their own questionnaire, and Lorraine Eyde's Work Motivation Scale. Most related to the desire to work found in some of the women was their need for achievement ($p < .01$) and dominance ($p < .05$). Luria found very different career and marriage trends for the 1967-68

graduates as compared to the 1969-70 graduates. Many more women had higher career goals and were planning to combine careers with marriage. Marriage was no longer found to be the predictor of occupational plans. The women, it appeared, had rising expectations for their lives, and wished to have a marriage-work-children multiple life form, even though this involved time and effort. Many of these women were married, and they reported that their husbands were supporting their career goals, some by modifying their own plans. It is possible that the changes Luria found within the four year span are reflective of the impact of the women's movement and the increasing number of females entering the labor force (Luria, 1974). It seems that societal standards have become more tolerant of female achievement, which should allow those females who wish to achieve to do so more openly and with less conflict.

Affiliation variable. The affiliation motive refers to the need to "seek and sustain numerous personal friendships" (Gough and Heilbrun, 1965, p. 11), or, more colloquially, "the need to acquire love and, perhaps, to give love" (Bardwick, 1971, p. 156). Generally females are thought to be more affiliative. The difficulty in assessing a sex difference is that many speculate that the needs to achieve and affiliate with others are interactive. One might be motivated to achieve in order to be praised or liked (e.g., Crandall et al., 1960), or one might strive to affiliate with a certain

person or group in order to gain influence and power (Atkinson, 1965). The research findings are contradictory.

After reviewing many studies with children, Maccoby and Jacklin (1974) concluded that "girls are not more affected than boys by social . . . reinforcement; and they are not more sensitive to the affective overtones of the feedback provided by an experimenter" (pp. 147-148). Deci (1972) looked at the behavior of 96 college students in different reinforcement conditions. No sex difference was shown on their time spent working on a spatial puzzle after receiving praise.

When children are observed, boys tend to engage more in social interaction with age-mates (see Maccoby and Jacklin, 1974). Yet when high school students are assessed, frequently girls report more need to affiliate on questionnaires. In MacDonald's study (1968), females believe they feel and display more love towards others than men do. Female physics students in Walberg's study (1969) say they have more social interests than males. In a sample of 450, females scored higher on the needs for affiliation and change measures; males were higher on the dogmatism measures.

Adolescence appears to be an important developmental time for young women. Bardwick (1971) concludes that adolescent "girls tend to fuse the need to achieve with the need to affiliate, using achievement as a means of securing acceptance and love" (p. 176). She believes that achieving affili-

actively becomes the most important motive for their self-esteem. In Douvan and Adelson's (1966) study of the adolescent experience, they found the goals of the females were infused with their desires to help others, meet people, and to find some setting where they would meet men to marry.

Some studies do not support the findings of a sex difference in the motives to affiliate. High school students (N=251) were measured on needs for achievement, needs for autonomy and needs for affiliation from Edward's Personal Preference Schedule (Sampson and Hancock, 1967). No sex differences emerged. Shemberg and Leventhal (1968) assessed 184 college students using the masculinity scale of the Guilford-Zimmerman Temperament Survey, the Marlowe-Crowne and the Edward's Social Desirability scales. Need for social approval seemed to be independent of both sex-role identification and biological sex.

Other studies are suggesting that women are desirous of satisfying equally their needs for affiliation and achievement, by marrying and raising children while pursuing a career. Gump (1972) looked at 162 senior college women in terms of their ego strength, happiness, and achievement plans. Her instruments were Fand's Inventory, slightly revised, questions on their attachment to a man, grade points, and Wessman et al.'s Elation-Depression Scale. Those with clear future plans (marriage or career) had higher ego strength scores. Grade points were the same regardless of

goal. "Neither happiness nor the establishing of relationships with men differentiated women traditional in sex-role orientation from women primarily interested in realizing their own potential" (p. 79). Lunneborg and Rosenwood (1972) used 465 college students to test an informal finding of Bardwick's (1971, p. 160), that women were strictly interpersonal and affiliative. Subjects were asked to respond to the questions of "What makes you happy? Sad? Angry? The only significant result ($p < .01$) is that more females than males gave affiliation themes to the happiness questions. The authors suggest a growing breakdown of sex stereotypes. "It would thus be more accurate for psychologists to describe college men and women as currently both possessing these needs (affiliation and achievement), with men becoming more concerned with loving and close interpersonal relationships and women more concerned with pride in school and work achievement" (p. 798).

Dominance variable. The definition of dominance is the need to seek and sustain leadership roles in groups or to be influential and controlling in individual relationships" (Gough and Heilbrun, 1965, p. 9). Maccoby and Jacklin summarize a series of studies using self-report measures, where males see themselves as higher on the dimensions of dominance, strength or power. Boys and men have also been observed to direct "more dominance attempts toward one another, toward authority figures, and perhaps toward females as well"

(p. 265). Further, they express more confidence in being able to control the outcomes of events. These findings appear to exist at all ages. Cameron (1970) gave questionnaires to 317 people, ranging in age from 18-79. The men judged themselves more powerful (and wealthy) than women did.

In McDonald's study (1968) in stereotypic fashion, adolescent males (black or white) described themselves on the Interpersonal Checklist as higher in dominance. Females had higher love scores than males (N=528). A sizeable sample of adolescents (N=1249) was used by Baltes and Nesselroade (1972). The males scored higher in dominance on Cattell's personality questionnaire. They were also more reserved, detached, surgent, adventurous, and self-sufficient than females. Girls were more sensitive and guilt-prone, and had greater superego strength than males, although boys were reported to have more ego strength. The male subjects in Benton et al.'s experiment (1969) (N=80) also rated themselves on a questionnaire as having a greater feeling of power than women did. After engaging in a mixed motive game, the females reported feeling less successful in changing their partner's behavior, and less responsible for their scores than men did. While both sexes expressed similar scores of trust and doubts, the females were more dissatisfied with their partners, more tense, and more unhappy about catching their partners in a lie.

Efforts by one person to dominate or control another can

serve a number of motives. In a cross-cultural study, Whiting and Pope (1974) (reported in Maccoby and Jacklin, 1974) separated the motive to dominate into "egoistic dominance" and taking responsibility. In five of six societies studied, boys showed "egoistic dominance," issuing directives to others. Girls in all seven cultures looked at were more likely to control the behavior of others for their welfare. Barry et al. (1957) also observed this pattern in girls in a survey of 110 cultures.

Summary. Investigators have explored responses to TATs in a multitude of ways. Some have looked at personality factors, and measured the number of times a particular theme or imagery was mentioned (e.g., McClelland, 1958; Murstein, 1963). Most frequently the subjects' needs or motives to achieve, dominate or affiliate were explored. Some times the measured need of a subject on a particular dimension was considered in terms of the sex of the respondent (Veroff, Wilcox and Atkinson, 1953; Rosenfeld and Franklin, 1966; Entwisle, 1972); occasionally the effect of race was measured with the need score (Cowan and Goldberg, 1967; Green and Winter, 1971; Tidrick, 1971). Only a few studies focussed on more than one need at a time, in order to assess the effects of interaction among needs of varying strength (Andrews, 1967; Cummin, 1967; Terhune, 1969; Veroff and Veroff, 1972). Many more studies considered the stimulus pull, the specific structural aspects of the picture (Eron et al., 1950; Mur-

stein, 1959, 1965, 1968). Still, these studies have been widely criticized for their lack of systematic scoring techniques, differing definitions of needs, variability in the test structure, that is, which pictures were used and in what order, and unaccounted for scores by female subjects (Crandall et al., 1960; Entwisle, 1972; Constantinople, 1973).

Another way of looking at TATs was created by Robert May (1966). Rather than assessing needs, he looked at patterns. For the males, he expected and found (1966, 1969, 1974) their fantasy stories "to show a pattern of success followed by failure, gain followed by loss, high expectations followed by unsatisfying achievements" (1966, p. 579). The shifts in emotional tone seen on the TATs May related to Murray's (1955) description of the Icarian personality. To be Icarian means to want to succeed and soar, all the while fearing to eventually fail or collapse. The female pattern moves in reverse--a woman might endure hardship for some later gain. The sequence of action or feelings observed on TATs written by females shows a progression from suffering or worry to success or joy (or love). May described this pattern as "feminine masochism" (1966). Whether or not the terms "Icarian" or "masochistic" add to the conceptualization of these patterns, for our purposes we prefer the simplified label of deprivation/enhancement (D/E). A DE score implies the feminine pattern, showing a relative shift from

negative tone to positive; an ED score is the reverse, the usual male pattern. In the scoring scheme, DE scores are positive and ED scores are negative.

In later studies May interviewed the extreme scorers (1969), and considered the age at which fantasy patterns began to differ among boys and girls (1971). He also considered the effect a homosexual orientation would have on an ED score (1974), as well as the effect of pathology on scores (1969). Indeed, homosexuals showed higher D/E scores; "hysterical" women were also more feminine, while "obsessive-compulsive" females had "masculine" (ED) fantasy patterns. This work by May suggests that personality factors might influence D/E scores, but as yet these have not been explored. Those who followed May were concerned with arousing sex-role identity to see if this influenced the fantasy patterns (Winter, 1969; Bramante, 1970); it did.

The objective of this study is to continue exploring the meaning of May's Derivation/Enhancement scoring techniques of fantasy stories. Our goals were two-fold. First, we wished to explore the stimulus effects of the main picture used by May. To this end we had the original scene, of a male trapeze artist holding a female in mid-air, redrawn--this time with the woman supporting the male. We speculated that this revised version might elicit higher D/E responses from both sexes. Secondly, we wanted to ascertain if there was an influence of personality needs on story patterns. If so, the

next question to be considered is if these needs account for the differences in D/E scores better than the sex criterion. To meet this objective, it was necessary to review what is known about sex differences in personality needs, particularly motives for achievement, dominance, and affiliation.

As we previously discussed, there are many problems in trying to assess needs from projective tests. Therefore we decided to investigate those studies using self-reported measures of needs. Even so, results are far from conclusive. Males by all accounts express more motives to achieve (Lunneborg, 1970; Nawas, 1971; Bem, 1972) and dominate (McDonald, 1968; Baltes and Nesselroade, 1972; Maccoby and Jacklin, 1974); females chose to affiliate (Walberg, 1969; Bardwick, 1971; Broverman et al., 1972). Many women appear to be concerned about losing their stereotypic "femininity" by striving to achieve, and seek out compromises (Weiss, 1962; Horner, 1972; Stein and Bailey, 1972). Prior to 1972, Lipman-Blumen found that 2/3 of 1012 college-educated women found their husband's accomplishment more gratifying than their own. Yet Luria's (1974) female subjects had higher career goals and were planning to combine careers with marriage. The latter was also true among Gump's (1972) subjects; these females expressed the desire to equally satisfy their needs for affiliation and achievement.

The difference between women's reported needs in early studies versus those from the last few years suggests a

change. While a woman may be more interested in having a love relationship than in achieving or influencing another, she still recognizes all these needs within herself. Once again, very little research exists on men's need to affiliate, but they can be expected to have strong needs to achieve and dominate.

How these needs will affect D/E scores is difficult to predict. Perhaps those males with higher needs to affiliate will have higher D/E scores, and females with strong motives to achieve and dominate will appear more masculine on the D/E measures. The inverse might also be true; those women with high affiliation needs will be more feminine on the scale, the men with high achievement and dominance needs more masculine. In sum, we would like to explore the interaction of these variables with sex and the condition, or picture stimulus.

C H A P T E R I I

METHOD

Subjects

The subjects for this study were 51 college students, 26 female and 25 male, drawn from an undergraduate course in personality at the University of Massachusetts. There was no significant difference in the age distribution between sexes, the mean age for females being 20.2 and for males 20.3 years. The subjects were not paid for their participation and did not initially volunteer, but only one member of the class requested his data not be used for research purposes. Another subject's data was excluded from the analysis because she was much older (57) than the others.

General Procedure

The subjects were asked, as part of a class lesson on personality testing, to complete a booklet which included four pictures and related questions and the Gough Adjective Check List (1965). Half of the booklets distributed contained the picture of the trapeze act which May used to develop his scoring system. This was presented first since that was how May placed it. The remaining booklets included the new picture of the trapeze act, which is the mirror-image of May's picture with the characters reversed. Both pictures were redrawn by an artist as a safeguard for reliability.

This way the male and female figures looked relatively similar in size and build. Following this first picture, whether it was the control or the experimental picture, was a sheet with three question headings, spaced throughout the page:

- 1) Who are the people? What has led up to the situation in the picture?
- 2) What is happening now? What are they feeling and thinking?
- 3) What happens next, what's the outcome?

The instructions on the top of this page were:

"Work rapidly. Don't spend over five minutes on this story. The questions below are guidelines."

On the bottom of the page was written:

"When you have finished the story, go on to the next picture."

The instructions used, the questions asked, and the placement of the picture of the trapeze scene all replicated the format previously used by May (1966).

Following this picture were three additional pictures, each followed by a sheet with the same question headings and instructions as previously mentioned. In both the experimental and control conditions the order of these three remained the same. Briefly, these pictures depicted: 1) a woman sitting, resting head on hand; 2) a poor, dejected couple sitting on steps; and 3) a man at a desk, looking at a family picture. These pictures were not scored because of the time

factor involved, and because they had not been used in many of the studies replicating May's (1966). Only the trapeze picture was consistently included. These extra pictures were used in class exercises.

Thus, the booklets were identical with the exception of the first picture. Some of these showed a male on top supporting a woman, some a female on top. Those subjects receiving the typical version, with the male on top, composed the control group. Those Ss receiving the inverted picture, with the female above, were designated as being in the experimental group. The booklets were distributed in such a way that every other one contained the control picture; this way we could insure a near equal size between the control and experimental groups. Fortunately, the class consisted of almost equal numbers of men and women. The outcome of the random distribution of booklets was 13 females receiving the control trapeze picture, 13 females the experimental or inverted scene, 13 males the control picture, and 12 males the experimental.

Gough's Adjective Check List. Given the difficulties with measuring needs from TAT stories as described earlier, we chose to use an independent measure of needs, a self-reporting adjective check list (ACL). Gough's ACL was chosen for several reasons. For one, it is based on the manifest need system proposed by H. A. Murray, who also constructed the original Thematic Apperception Test (Anastasi, 1961;

Rabin, 1968). The fifteen need scales included in Gough's ACL each represent a disposition within Murray's need-press system (Gough and Heilbrun, 1971). Thus, there is a consistent theoretical framework behind both forms of personality tests. Another reason to use Gough's ACL is that in a number of studies it has reportedly demonstrated reasonable reliability (Anastasi, 1961; Gough and Heilbrun, 1971). Also, the adjectives included are at face value commonly used terms. Gough's ACL consists of 300 common words arranged alphabetically, measuring the strength of fifteen needs and nine other scales, including measures of defensiveness and social desirability (see Appendix A). Subjects were given the complete form, and asked to check all those s/he considered to be descriptive of him/herself. The three Need Scales that we were particularly interested in, based on past studies, were Achievement, Dominance and Affiliation. Achievement is defined as "to strive to be outstanding in pursuits of socially recognized significance" (Gough and Heilbrun, 1971, p. 9). The definition of Dominance is "to seek and sustain leadership roles in groups or to be influential and controlling in individual relationships" (p. 9), and Affiliation means "to seek and sustain numerous personal friendships" (p. 10). The other Need Scales include Endurance, Order, Intraception, Nurturance, Heterosexuality, Exhibition, Autonomy, Aggression, Change, Succorance, Abasement, Deference, and Counseling Readiness.

Reliability. In order to assess interrater reliability, two judges were employed.* To eliminate possible scorer bias, all the identifying features (sex and condition) of the protocols were eliminated, and they were identified by code numbers. One judge scored all 51 protocols and the other scored 21, selected at random. Those that she had not independently scored she still reviewed. The rate of agreement between the scoring of the two judges was high (Pearson $r = .99$, $p < .001$). Because there was a time-delay in scoring all the stories, one judge rescored the 30 stories she had originally scored; the test-retest reliability over the eight-month period was $r = .91$ ($p < .001$). These scores are presented in Table 1.

*Many many thanks are given to Diane Furtney and Robert May for scoring the TAT stories. Without their time and aid, this study would not have been possible.

Table 1
Interscorer Reliability

Trapeze Picture		
Score Correlations	N	21
	r	.88
	p	< .01

Test/retest Reliability

Trapeze Picture		
Score Correlations	N	30
	r	.91
	p	< .01

C H A P T E R I I I

RESULTS

The first analysis concerns the hypothesized sex difference in D/E fantasy patterns. In order to determine if the male and female subjects (Ss) showed the same difference in scores as May's (1966) did, only the control groups were compared. These Ss responded to the original trapeze scene. It was felt that in the experimental group, where the picture was redrawn with the female trapeze artist supporting a male, the possibility exists that the sex difference would be confounded by treatment effects. The scores for each S were looked at in two ways: first, by comparing their means, and second, by examining the proportions of Ss showing the predicted pattern. The first comparison is presented in Table 2. The sex difference is not significant. The scores of the female Ss are remarkably close to the females' scores from May's study; however, there is a striking and unexpected difference between May's men and ours ($t = 2.554$, $p < .02$). In our sample the males scored more positively or "femininely" than the females.

A closer inspection of the data reveals that one member in the female control group was quite unlike the others in that cell. When her score was removed from the analysis, the mean of the female group rose to 1.750 ($SD = 4.371$). In this case, our females had higher DE scores than the women in

Table 2
Pattern Differences in Total Scores
for the Control Groups

	N	Mean	S.D.	diff.	t-ratio	p
Female 1	12	1.750	4.371			
Female 2	13	0.769	5.48	2.231	0.354	N.S.
Male	13	1.385	2.53			

May (1966) Study*

	N	Mean	S.D.	diff.	t-ratio	p
Female	47	+0.787	2.30			
Male	28	-0.714	2.32	1.501	2.729	<.01

*Ss drawn from large coed university, a private women's college, and an engineering college.

May's sample. Because of the effect that this one subject had on the data, it was decided to consider each of the analyses with and without her scores.

The second comparison considers the number of Ss who reveal the predicted female (a positive DE score) and the predicted male (a negative or ED score) patterns (see Table 3). The results showed a lack of sex differences. Only about 35% of the Ss score in the direction predicted for their sex. This contrasts sharply with May's finding that about 67% of his Ss scored in the predicted direction. While 70% of the females in this study score in the predicted direction, only 22% of the males do so.

The results from these analyses, the comparison between male and female means and the analysis of the number of Ss revealing the predicted pattern, do not appear to replicate May's (1966) study. Our female Ss look similar to May's, but our males are unexpectedly more "feminine". In short, our findings suggest no sex difference, since scores of our men look like women's scores.

The next analysis concerns the effect of the experimental treatment, where Ss responded to a reversed-figure trapeze scene (with the female supporting the male). Our first consideration was the comparison of the means of the experimental groups with the means of the control group. This is presented in Table 4. The only difference is between the female groups when the deviant's score is included, those

Table 3

Number and Percentage of Ss in the Control Groups
Whose Stories Achieved Positive and Negative Scores

	Positive Scores		Negative Scores	
	Number	Percentage	Number	Percentage
Females	7	54	3	23
Males	7	54	2	15
N = 26				

Note: Three females (23%) and four males (31%) had scores of 0.

Table 4

Deprivation/Enhancement Scores

Sex	Picture	
	Control Trapeze (male holds female)	Experimental Trapeze (female holds male)
Women		
N	12*	13
M	1.750	1.923
SD	4.371	3.23
Men		
N	13	12
M	1.385	1.833
SD	2.53	3.33

*With the deviant included in this group, N = 13, M = 0.769, and SD = 5.48.

who looked at the experimental trapeze picture scored more positively than those responding to the original scene, but this is not significant ($t = .631, p < .8$). However, when the deviant's score is removed from the female control group, even this difference is obliterated ($\text{diff.}_{M_E - M_C} = .173$).

Looking at how many Ss in the experimental group scored in the predicted direction was the next analysis. As can be seen from Table 5, 52% of the Ss scored in the hypothesized direction (85% of the females, 17% of the males). This shows an increase from the 35% of control Ss whose scores showed the predicted pattern. Collapsing the sex variable, and looking at the effect of the pictures, suggests that the experimental picture (with the female on top) pulled more positive scores. But experimental condition does pull higher scores for women and control condition pulls higher scores for men (within sex comparisons).

The effects of the two major variables, sex and condition (picture), on the D/E fantasy measure were assessed using a 2 x 2 analysis on variance (see Table 6). Neither sex nor condition were significant. There was, however, a trend in the predicted direction for the condition. Thus, our second hypothesis, that the experimental picture would elicit more "felinine" or positive scores, was not supported statistically. The tendency, nonetheless, is in the predicted direction. Possibly if the sample size was larger the results would achieve significance.

Table 5A

Number and Percentage of Ss in the Experimental Groups
Whose Stories Achieved Positive and Negative Scores

	Positive Scores		Negative Scores	
	Number	Percentage	Number	Percentage
Females	11	85	2	15
Males	10	83	3	17
N = 25				

Table 5B

Number and Percentage of Ss (Regardless of Condition)
Whose Stories Achieved Positive and Negative Scores*

	Positive Scores		Negative Scores	
	Number	Percentage	Number	Percentage
Females	18	69	5	19
Males	17	68	4	16
N = 51				

*Three females and four males had scores of 0.

Table 5C

Number and Percentage of Ss (Regardless of Sex)
Whose Stories Achieved Positive and Negative Scores*

	Positive Scores		Negative Scores	
	Number	Percentage	Number	Percentage
Control	14	54	5	19
Experiment.	21	84	4	16
N = 51				

Table 6

Analysis of Variance for the D/E Fantasy Score*

Source of variance	df	MS	F	p
Sex	1	.0880	.0605	N.S.
Condition (Picture)	1	8.1764	.5619	N.S.
Sex x Condition	1	1.5829	.1088	N.S.
Subjects within cell	47	683.9744		

N = 51

*When the deviant is eliminated from this analysis, $F_{\text{sex}} = .0557$, $F_{\text{Cond}} = .1039$, and $F_{\text{SxC}} = .0204$; none are significant.

In order to understand more clearly why the experimental picture--with the female supporting the male on a trapeze--intensified feminine scores, several additional comparisons were made. First, the total number of deprivation (D) and enhancement (E) units used by each sex were counted. Comparisons were made between the sexes and also between the conditions. None of the comparisons were statistically significant (see Table 7). Another comparison was made following a suggestion of May's (1966) to compare the number of E units minus the number of D units that occur before the pivotal incident. While the women responding to the trapeze picture in May's study had more D units ($p < .05$), in this study no sex differences were found in stories written about this picture.

The next large question focusses on the relationship between D/E scores and personality needs, specifically achievement, dominance, and affiliation, as measured by Gough's ACL (1971). Table 8 presents the means and standard deviations of the groups, and Table 9 shows the summaries of the analyses of variance. Quite unexpected is the finding that the female Ss reported significantly higher ($p < .005$) needs for achievement than the males. It is also evident that the females have more significant ($p < .02$) needs for dominance than the male Ss, and both sexes report similar affiliation needs. These results are not consistent with the studies reported in the literature review, revealing instead a reversal of ex-

Table 7A

Number of Deprivation and Enhancement Units Per Group

	D Units		E Units	
	Mean	S.D.	Mean	S.D.
Female Control Group (FC)	4.08	21.92	5.23	33.38
Female Experimental Group (FE)	2.69	11.15	6.69	56.23
Male Control Group (MC)	2.62	11.08	4.69	49.77
Male Experimental Group (ME)	4.92	30.00	4.25	23.08

Comparisons between Deprivation Units between Groups

	t	p		t	p
Males-females	.44	N.S.	FC-FE	.46	N.S. ^o
Experimental-			FC-MC	.47	N.S. ^o
control condition	1.30	N.S.	FC-ME	-.25	N.S.*
	df = 48		FE-MC	.02	N.S. ^o
			FE-ME	-.71	N.S.*
			MC-ME	.73	N.S.*

Comparisons between Enhancement Units between Groups

	t	p		t	p
Males-females	-.43	N.S.	FC-FE	-.35	N.S. ^o
Experimental-			FC-MC	.09	N.S. ^o
control condition	.13	N.S.	FC-ME	.30	N.S.*
	df = 49		FE-MC	-.50	N.S. ^o
			FE-ME	.60	N.S.*
			MC-ME	.03	N.S.*

Table 7B

Number of Enhancement Units Minus the Number of Deprivation Units before the Pivotal Incident

	Mean	S.D.
Female Control Group	.15	11.08
Female Experimental Group	.88	4.17
Male Control Group	.31	5.69
Male Experimental Group	-1.25	4.58

Comparisons between E-D Units before Pivotal Incident between groups

	t	p		t	p
Males-females	.02	N.S.	FE-FC	.50	N.S. ^o
Experimental-			FC-MC	-.07	N.S. ^o
control condition	.17	N.S.	FC-ME	.37	N.S.*
	df = 49		MC-FE	-.21	N.S. ^o
			ME-FE	.67	N.S.*
			MC-ME	.53	N.S.*

*df = 23; ^odf = 24.

Table 8

Means and Standard Deviations for Independent Variables
as a Function of Sex and Condition

	Achievement		Dominance		Affiliation	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Female Control*	49.769	13.876	50.615	15.025	41.538	12.817
Female Experimental	53.385	9.527	52.769	11.099	50.385	8.865
Male Control	44.769	9.993	45.308	12.848	43.308	8.220
Male Experimental	40.417	8.898	40.667	10.924	42.083	12.573

*When the deviant subject's scores are eliminated from this group, the results are:

51.167 13.503 51.417 15.400 40.917 12.180

Table 9A

Analysis of Variance for Achievement
Dominance and Affiliation

	Achievement		Dominance		Affiliation	
	F	P*	F	P*	F	P*
Sex	8.853	.005	6.063	.02	1.168	N.S.
Condition	.015	N.S.	.124	N.S.	1.591	N.S.
Sex x Condition	1.740	N.S.	.923	N.S.	2.777	N.S.

*df = 1

Table 9B

Analysis of Variance for Achievement, Dominance and
Affiliation Excluding the Scores of the Deviant Female
Control Subject

	Achievement		Dominance		Affiliation	
	F	P*	F	P*	F	P*
Sex	10.447	.005	6.449	.02	.928	N.S.
Condition	.127	N.S.	.210	N.S.	1.805	N.S.
Sex x Condition	1.203	N.S.	.598	N.S.	3.036	N.S.

*df = 1

pected sex differences on needs. The effect of the condition was minimal in these analyses, adding confidence to the conclusion that the differences in needs between groups were due to the sex difference. A comparison of the means in Table 8 supports this statement.

In order to determine the relationship between needs scores and patterns on the D/E measure, a step-wise multiple regression technique was used. The summary of the multiple regression analysis appears in Tables 10A and 10B. None of the variables considered--sex, condition, needs for achievement, dominance and affiliation--correlated significantly with the D/E score, although some correlated highly with each other (see Table 11). The inconclusive results were foretold by the analysis of variance for the D/E Score (Table 6), where neither sex nor condition accounted for the D/E measure (also Table 10C). Still, both analyses suggest that the condition variable is a possible important contributor to D/E patterns.

Additional Analysis

It is apparent that the D/E measure neither correlates significantly with anything (Table 11) nor can be predicted from any variables than have been considered (Table 10). One possibility that was considered post hoc was to explore if other variables which had been assessed from Gough's ACL but not included in the original formulations of the study, could

Table 10A

Summary of Multiple Regression Analyses on the D/E
Fantasy Measure as a Function of the Variables on the ACL*

<u>Dependent Variable</u>	<u>R</u>	<u>R²</u>	<u>F</u>	<u>P</u>
Deprivation/Enhancement Score (D/E)	.2197	.0483	.794	N.S.
<u>Predictor Variables</u>	<u>Regression Coef.</u>	<u>t</u>	<u>P</u>	
Condition	1.03786	.970		N.S.
Achievement	.04909	1.021		N.S.
Affiliation	-.05769	1.118		N.S.
Regression Constant	.16600			

df = 3, 47

Table 10B

Summary of Multiple Regression Analyses on the D/E
Fantasy Measure as a Function of the Variables on the ACL**

<u>Dependent Variable</u>	<u>R</u>	<u>R²</u>	<u>F</u>	<u>P</u>
Deprivation/Enhancement Score (D/E)	.2829	.0800	2.088	N.S.
<u>Predictor Variables</u>	<u>Regression Coeff.</u>	<u>t</u>	<u>P</u>	
Order	.08053	1.533		N.S.
Change	-.05894	-1.276		N.S.
Regression Constant	.71917			

df = 2, 48

*Variables that did not account for the regression equation were sex and need for dominance.

**Variables that did not account for the regression equation were sex, condition, personal adjustment, counseling readiness, needs for achievement, dominance, affiliation, endurance, intraception, nurturance, heterosexuality, exhibition, autonomy, aggression, succorance, abasement, and deference.

Table 10C

Correlations and Tests of Significance with the D/E Measure

<u>Variables</u>	<u>D/E Score r</u>	<u>t*</u>
Order	.221	1.5861
End	.192	1.3694
Change	-.187	1.3324
Enh	-.112	-.7889
Cond (Exp.)	.109	.7676
Affl.	.103	.7249
Ach.	.102	.7214
Int	.102	.7214
Aut	-.097	.6822
Dom	.073	.5123
CRs	.062	.4343
PeAd	.053	.3715
Nurt	-.040	.2802
Sex	.034	.2421
Agg	.020	.1400
Suc	.020	.1400
Def	.019	.1330
Het	-.014	-.0980
Aba	.007	.0490

*All correlations nonsignificant; df = 49.

Table 11

Correlation Matrix

D/E	Sex	Cond	Ach	Dom	Affl	End	Ord	Int	Nur	Het	Exh	Aut	Agg	Cha	Suc	Aba	Def	Crs	PeAd
D/E	1.000	.034	.109	.102	.073	.192	.221	.102	-.040	-.014	-.112	-.097	.020	-.187	.020	.007	.019	.062	.053
Sex		1.000	-.020	-.389°	-.332*	-.151	-.101	-.094	-.003	-.199	-.360°	-.319*	-.179	-.396°	.042	.215	.321*	.126	-.155
Cond			1.000	-.005	-.039	.178	.073	.046	.118	.262	-.084	-.126	-.092	-.014	.188	.116	.192	-.135	.151
Ach				1.000	.887+	.291*	.704+	.327*	.047	.302*	.520°	.440°	.380°	.395°	-.440°	-.607+	-.462+	-.087	.402°
Dom					1.000	.314*	.522+	.213	.036	.490+	.718+	.592+	.500+	.465+	-.652+	-.851+	-.657+	-.248	.331*
Affl						1.000	.301*	.505+	.748+	.398°	.084	-.179	-.421°	.411°	-.334*	-.139	.166	-.567+	.676+
End							1.000	.454+	.231	.099	.171	.140	.031	.136	-.401°	-.357*	-.199	-.105	.533+
Ord								1.000	.368°	-.038	.052	.077	.065	-.048	-.196	-.172	-.019	.073	.357*
Int									1.000	.672+	-.117	-.219	-.533+	.250	-.307*	.020	.227	-.152	.732+
Nur										1.000	.173	-.412*	-.718+	.189	-.303*	.105	.401*	-.492+	.641+
Het											1.000	.292*	.275	.482+	-.241	-.455+	-.401*	-.461+	.134
Exh												1.000	.683+	.549+	-.352*	-.731+	-.794+	-.208	-.083
Aut													1.000	.712+	-.372°	-.736+	-.879+	.148	-.274
Agg														1.000	.145	-.613+	-.762+	.172	-.488+
Cha															1.000	-.355*	-.436*	-.222	.283
Suc																1.000	.747+	.408*	-.434°
Aba																	1.000	.216	-.117
Def																		1.000	.180
Crs																			1.000
PeAd																			

*Significant at .05 level
°Significant at .01 level
+Significant at .001 level

better determine patterns on the D/E measure. A choice was made to use a step-wise regression analysis because it allows one to perceive any and all variables that can predict the dependent variable. Although there is little in the literature suggesting the utility of these additional variables, it was hoped that some findings from this study would offer a broader range of possibilities for future research with the D/E fantasy measure.

When the 20 variables were regressed using all Ss in a manner consistent with the above analyses, no significant predictor variables emerged (see Table 12). Because the sex difference seemed to account for much of the variation between Ss' need scores (at least on achievement and dominance), we decided to control for sex in subsequent regression analyses. Results proved interesting, as can be seen in Table 12. While none of the need scores seemed to account for the variability about the mean among the male subjects, several factors were significant for the females. The regression for male Ss was not significant. However, the similar analysis for female Ss yielded a significant R of .8693 indicating that the thirteen predictors accounted for 76% of the variability of the D/E measure ($F = 2.855$, $p < .01$). The most important contributor to the regression equation was the need for nurturance ($p < .001$). Need scores on achievement, autonomy, and deference were also significant ($p < .01$). The condition and counseling readiness score, as well as need

Table 12

Summary of Multiple Regression Analyses on the D/E
Fantasy Measure as a Function of the Variables on the ACL

Females				
<u>Dependent Variable</u>	<u>R</u>	<u>R²</u>	<u>F</u>	<u>P</u>
Deprivation/Enhancement Score (D/E)	.8693	.7557	2.855	.01 df=13,37
<u>Predictor Variables</u>	<u>Regression Coeff.</u>	<u>t</u>	<u>P(df=12)</u>	
Condition	6.65102	2.427	.05	
Achievement	-.86477	3.223	.01	
Dominance	.57796	1.966	N.S.	
Endurance	.36156	2.242	.05	
Intraception	.17548	1.177	N.S.	
Nurturance	.38759	4.559	.001	
Heterosexuality	-.12735	-.764	N.S.	
Exhibition	-.55481	-3.143	.01	
Autonomy	-.36410	-1.927	N.S.	
Change	-.11886	-.970	N.S.	
Succorance	.43992	2.633	.05	
Deference	-.99985	-3.823	.01	
Counseling Readiness	.41043	2.571	.05	
Regression Constant	-40.83772			
Males				
<u>Dependent Variable</u>	<u>R</u>	<u>R²</u>	<u>F</u>	<u>P</u>
Deprivation/Enhancement Score (D/E)	.6191	.3833	1.541	N.S. df=7,43
<u>Predictor Variables</u>	<u>Regression Coeff.</u>	<u>t</u>	<u>P(df=17)</u>	
Achievement	.08662	.585	N.S.	
Dominance	.18178	1.142	N.S.	
Affiliation	-.14954	1.736	N.S.	
Intraception	-.13665	1.752	N.S.	
Nurturance	.20817	2.012	N.S.	
Change	.07059	1.100	N.S.	
Counseling Readiness	.18297	1.796	N.S.	
Regression Constant	-20.32667			

scores on endurance and succorance, were significant ($p < .05$). The fact that several of the predictors could account for female patterns and none for male patterns, might result from the fact that there is more variability among the female Ss (see Tables 4 and 8).

Given the significant findings once the regressions were performed separating the males and females, we returned to our original variables to see if they could predict the D/E measure any better when the sex factor was removed from the analysis. What emerged was that need for achievement was a predictor of D/E scores for males ($p < .05$). Nothing was significant for the females Ss.

C H A P T E R I V

DISCUSSION

The hypotheses for the present study were generated directly from intuitions in the literature. Specifically, May (1966, 1969, 1974) reported findings indicating movement from relative deprivation to enhancement for females and a reversed trend for males. Several replications (Winter, 1969; Bramante, 1970; Saunders, 1971; Cramer and Bryson, 1973) provided additional validity to the construct of D/E patterns differentiating the sexes.

The other major empirical antecedents of this study are those findings suggesting that stimulus effects account for much of the variability in TAT protocols (Eron, Terry, and Callahan, 1950; Murstein, 1963, 1968). Given the foregoing, the experimental manipulation switched the positions of the male and female on the trapeze picture. The following hypotheses were generated: 1) Responses to the trapeze scene previously used by May will replicate the sex differences May (1966) found in fantasy patterns; 2) Male and female Ss responding to the reversed picture condition would both produce responses to the TAT more feminine than in the control condition.

The first hypothesis was not confirmed. In the control condition, female Ss had DE scores resembling those in May's (1966) study. In contrast, the male Ss' stories in this

group resembled those of the females'. Thus it is the males' scores which differ significantly ($p < .05$) from those in the original report. In order to understand this discrepancy, the meaning of a negative D/E (or ED) score should be reviewed. Briefly, "masculine" scores are achieved by those wanting success and fearing failure. One explanation offered by May to explain the "masculine" pattern found in his work with the TAT (i.e., E/D) is that men struggle to fend off needs and wishes for dependency or the giving up of conscious ego control. Those with the lowest ED scores, the most "masculine" scores, are typically "men who overcompensate for feelings of uncertainty as to their masculinity" (Fried, 1971, p. 43). The fact that the males in this study did not score in the typical masculine fashion might mean that they are less threatened by the loss of control or autonomy, or less "masculine" than those males used in May's study. Somewhat confusing is that the men scored higher than the homosexuals in May's (1974) study (diff. = 0.671), although their needs for Heterosexuality on the ACL were no different than the standard mean established by Gough and Heilbrun (1971). To explore these hypotheses, we need consider some underlying dimensions of D/E scores that could be ascertained from the content of stories, from independent measures, and then variances between the two samples.

An analysis of variance was conducted; the result was that reversing the stimulus had no statistically significant

effect on D/E scores. This leads us to reject the second hypothesis, i.e., that the new picture would intensify positive DE scores.

A regression analysis using all fifteen need scores on the ACL, plus scores for personal adjustment and counseling readiness (Gough and Heilbrun, 1971) as predictor variables was performed. Nothing emerged as significant. However, an ad hoc analysis separating male and female Ss was computed. When males were analyzed separately, none of the variables emerged as significant predictors of D/E scores. The females, contrary to the males, were influenced by the experimental condition (the female above scene), which elevated D/E scores. Specifically, condition ($p < .05$) entered into a strong regression equation ($R = .8693$) for women Ss. The possibility remains that with a larger sample the effect of picture manipulation, reversing the gender of the catcher, might have been an important factor in predicting D/E fantasy patterns. At the present time, however, we must conclude that there is no difference between conditions.

More difficult to explain is the striking sex difference in the personality needs measured on the ACL. The predictions concerning the relative strength of the three needs--for achievement, dominance and affiliation--were based on the literature reviewed in the introduction. Most authors purport high motives to achieve and dominate to be characteristic of males in this society (e.g., Lunneborg, 1970, 1972;

Lunneborg et al., 1970; Bardwick, 1971; Bem, 1972; Maccoby and Jacklin, 1974), yet this was not supported in our results. Only three men scored in the upper quartile of both of the aforementioned needs. Conversely, only two women fell into the lower quartiles of these needs. One hint we made to the increasing strength of these motives in females were the recent studies of Lunneborg and Rosenwood (1971), Horner (1972), Gump (1972), and Luria (1974). These authors made note of the fact that the stereotypic images of men and women were narrowing in scope. That is, men were beginning to express less need for achievement and more for affiliation, and females, concurrently, more desire to achieve and dominate in what had been considered predominantly male functions. The researchers mentioned cited socio-cultural explanations for their findings, centering on the influence of the women's movement which both encourages these motives in females and promotes the acceptance of more sentience needs in males. Still, one would expect a gradational increase in motives not usually fostered in the respective gender, not a complete inversion of need patterns. While there was no question that the gap between sex-roles was diminishing, there was certainly not a reversal of characteristics. For the moment, though let's pursue this interpretation.

Luria's (1974) study looked at the personality and goals of some women college graduates from 1967 to 1970. The time span was sufficient to produce differing results. Whereas

the initial group was less focussed on careers, the latter Ss were intent on combining careers with marriage. In addition, the Ss interviewed reported that their husbands or boyfriends were willing to compromise some of their own plans to allow the female to pursue hers. One inference is that the females are more assertive within their relationships. Not surprising, strong needs for achievement (nAch) and needs for dominance (nDom) predicted higher career goals. Luria looked to Ruth Hartley for an understanding of her results.

Ruth Hartley (1972) has argued that socialization of human behavior is, in part, the effect of watching others like one's self for clues to expected behavior for the self. With respect to women working, the process is similar. When a majority of the group of which one is a part fills a role, that role is no longer purely descriptive for members of the group, it becomes prescriptive (Luria, 1974, p. 314).

When 50% of people in any given setting begin to behave in a certain way a "tipping point" is reached. Thus, when 50% of women begin to pursue careers, for example, it is no longer simply acceptable for a female to work, but rather a social expectation.

If such notable changes could take place in Luria's replication of her own study over four years, with all factors remaining constant but the year of the study, it is not surprising to find changes between her last data, collected in 1970, and the results of the present study, where the data was collected in late 1973. It is possible that the trend

seen in female college students increased notably within the last few years. Similarly, undergraduate males might be progressively incorporating highly valued feminine needs (of sensitivity, warmth, sharing of feelings) into their self-concepts, and shunning more stereotypic masculine goals for success and power.

In the socio-cultural milieu of a university setting, the traditional value placed on males' domination and aggression is losing some of its old regard. For both men and women, there appears to be a regression toward the mean in values and motives. Androgynous people (Bem, 1972) are emerging from this milieu. In addition to the effects of the women's movement, the last few years have been effected by the discontinuation of the draft. No longer do males have to prepare themselves for either engaging in war or battling the system. Watergate, too, has had its effect on college men. The scandal involving key figures in our government taught a lesson that power for its own sake is not desirable nor esteemed.

Although it is tempting to accept this socio-psychological explanation of the reversed need scores, by necessity we must examine other variables that might account for the discrepancy between need scores on this study and prior research. Indeed, there are several explanations.

There may be biases in the sampling. All Ss were members of a psychology class taught by a woman full professor.

During the same semester another class was being taught by a male, assistant professor. A pre-selection process might have been in existence if Ss chose the female over the male professor on the basis of their sex or esteem.

Another confounding factor is that the female professor has a propensity to evaluate and explore societal sex roles. At the same time she was teaching this lecture course, she was also leading a seminar focussing on sex-roles. Ss knowing this before the semester began may have selected her course because they were already expanding their views on appropriate behavior for each sex, and wished to discuss this more. Of course, it is natural to expect that a good percentage of the members of the class were there because of the time it was being taught. Also, the testing was done near the onset of the course before the class began to discuss sex-role issues. So this explanation is probably not significant.

One other factor that might account for the high nAch and nDom seen in the females tested from this class was that the experimenter was a female graduate student. It has been suggested that this might elicit higher nAch scores in female Ss (Murstien, 1963). Last, but not least, the small-group leaders from this course were questioned about their observations of the class. All three noted that the females dominated their discussion groups. Given all these factors, it seems clear that even within a university setting, we may

have been dealing with a special subsection of people. Males and females in this group were not generally "stereotypic"; e.g., many females were strong and assertive, males were concerned with pacifism and gentility--behaviors traditionally considered atypical for their gender. In summary, the present socio-cultural milieu of a university setting, interacting with the specifics of being in a psychology class taught by a highly esteemed woman professor, with an emphasis on sex-roles, and participating in a study conducted by a female graduate student, are all factors that might account for the remarkable reversal of sex differences on needs for achievement and dominance; and the fact that, relative to need for affiliation, no sex differences were observed.

Now the question arises, how is the present sample different from that used by May? For one, his data was collected in 1966, before the impact of the women's movement and the long agony of the Vietnam War. For another, while we tried to assess a comparable sample of university students, it is clear that those in this sample were different, many acting in ways that would not be seen as traditionally stereotypic for their gender. Had May's (1966) study included personality assessment, we could have compared the needs of the Ss, and how those affected their D/E fantasy score. We also know little about his subject pool, other than that they were drawn from a large coed university, a private women's college, and an engineering college. Variations between these

samples would be useful knowledge. The question still remains whether this study failed to replicate May's (1966) work because of the changes in method or because the times have changed. Lacking this information, our best path to an understanding of the variances between Ss is to examine the content of their stories.

In sum, we cannot answer the question raised in the introduction of whether it is personality factors or differences in gender that account for more of the variability on the D/E measure. The females in this sample for the most part report strong needs and motives that for years have been the province of males (achievement and dominance), and they still look "feminine" on the D/E measure. The males, who generally reported significantly less nAch and nDom than the women, write stories that are also "feminine," moving from themes of deprivation to enhancement. The consistency of the pattern with which the females responded on the fantasy measure from May's (1966) study and the present one might suggest a lack of influence of personality needs. This finding could support a generic explanation of sex differences. Yet the stunning reversal of the male Ss on the D/E scores would appear to be correlated with a similar reversal (their low scores) on measures of nAch and nDom. These results lend credence to the hypothesis that personality needs contribute to D/E fantasy scores. In sum, one might explain the vicissitudes by an interaction effect of these factors.

Content Analysis

May reported that males showing the most "masculine" or negative (E/D) scores looked like a "tough guy" on Gough's MF scale (1952), and spoke of sex role dissatisfaction in a structured interview. In his follow-up study (1969) he looked more closely at the thematic differences between high and low scoring males. The higher ED scorers, those showing the least "masculine" pattern, conveyed a sense of isolation and strain. Those lower on the D/E scale were notable for their perceived sense of failure in living up to what they saw as the ideal male role--being aggressive and competent--and some jealousy that females did not have demands placed on them to be competent and independent.

The results from the present study present a striking contrast. The expectation that the most "masculine" stories would come from men high in nAch and nDom, using Gough's ACL (1971) as a tool to assess the need strengths, was not supported. To begin with, the four lowest scoring male Ss on the D/E measure (i.e., non-masculine scores) also reported the least needs for both achievement and dominance. Not only was this the inverse of what the literature led us to expect, but only three men scored in the upper quartile on needs for achievement, and their average D/E score was 2.67, well above the mean of all Ss ($M = 1.06$). One of these men also scored high on nDom, and his DE score was average. No other men were in the top quartile of high dominance needs. One ex-

planation offered to explain these surprising results is that those men who care about achieving and dominating others are willing to work and strive to meet these goals (outcome would be positive DE scores); those with low nAch and low nDom might be uncomfortable or concerned about their masculinity, which would lead to low D/E scores. The content of the stories written by these men high in nAch in response to the trapeze picture are consistent with this interpretation. For example, one male writes "The people . . . are two well-trained circus performers. They have been practicing together for many years and have done many performances together."

Males with positive or "feminine" DE scores ($M = 6.0$) reflect themes of hard work and struggle leading to desired outcomes, or what May described as "feminine masochism" (1966). One S, for example, writes "They have spent probably the greatest part of their life in simply practicing various acts Always in the back of their mind is the idea of death Relief, he has just caught her as they have done a thousand times before." The theme of death occurs in another story in this group.

This is a life and death situation depending on the one person to catch the other. If not, disaster could result They swing to the platform . . . where they each hold their arms around each other, acknowledging the applause from the audience. The outcome is obviously a successful one.

One male writes of helping a woman do a daring feat, by supporting her with a "firm grip." This "assures her establishment as a principal star in the Circus."

Three males showing more extreme patterns of enhancement followed by loss ($M = -4$) had scores on nAch and nDom below the mean. This is reflected in their stories. Two write about hard work, hours of practice, and not being appreciated enough. The goal for one is "to go make love on one of the wagons." The other male in this grouping centers his story exclusively on the relationship, making no note of the trapeze scene. His relationship with his fiance has been going well, but he is thinking of letting her go because he does not love her. "After much straining . . . they will separate and he will feel guilty about letting her down and she will feel foolish about trying to save something that could not be saved." These stories were noteworthy for their pessimism. The enhancement themes are minimal in contrast to the deprivation themes.

The women in this sample had D/E patterns not unlike May's (1966) female subjects. The theme in the original stories centered on effort and struggle leading to happiness or a desired goal. In May's second study (1969) he interviewed female Ss. One pattern that distinguished high DE scorers was a dislike of the passivity and placidity inherent in the female role. Accepting and valuing these qualities led to low D/E scores. In the female Ss in this sample, many more

themes emerged about females feeling confident in their abilities to perform, especially among the high scorers. This is noteworthy, for a review of studies on women and achievement showed that "even when females are perceived as performing competently, their performance is more likely to be attributed to luck as opposed to skill than that of males" (Stein and Bailey, 1972, p. 355). The low scorers in this study are the ones to write of people falling to their death, or at least to some injury. May (1966) noted females focused on relationship issues; in the present study the task outweighed the relationship. Also contrary to his observation, women Ss in this study had few stories of dreams or memories. No sex differences could be found in regard to qualities or orientations of stories.

It is noteworthy that the lowest ED scores were achieved by females. Similar to the low ED male scorers, most focused on the success or failure of the trapeze act and not the relationship. Of all the stories written, these had the most disturbing themes. The female whom we have previously labelled the deviant because her story was far more negative than any other Ss wrote:

They are lovers . . . trapeze artists They feel very important and in a state of elevation because flying through the air makes them feel very high. [Ending] Very awful. Because he does not catch her and she falls to the ground (no net) and dies. He then leaves the circus and is very suicidal.

One female who had the experimental scene (reversed picture) writes of the male falling to his death; another woman reports the female performer falling and breaking her leg. These stories are a clear example of "Icarianism," the pattern described by May as descriptive of males.

One other female S focuses on the relationship. Summarizing, the guy and "his chick" are together while he is on an acid trip. But when he comes down he will realize that it will never be the same again--she is playing the field, "doesn't want to be tied down to one man." Surely this S is not the typical, passive-dependent female. Still, she had a low score on nDom. The female S who reported the trapeze artist falling and breaking her leg had very high needs for achievement and dominance, and high needs for affiliation, but low needs for deference, abasement and nurturance. No consistency could be found between the strength of needs and the D/E fantasy pattern. In light of the nonsignificant findings on the regression analysis with all Ss, this is not unexpected.

True to anticipations, the highest or most "feminine" DE scores belong to female Ss. A characteristic theme is that if one works hard, one can expect pleasing results. One woman writes "the two trapezists are very pleased with the result of their long hours of practice and their achievement of perfection, take well deserved bows and happily walk out away from the public to enjoy their achievement in their intimate

private worlds." This S appears to combine public accomplishment with an internal sense of gratification. Similarly, another S writes that the woman acrobat is about to do a new act.

She secretly knows she can do it, and keeps telling herself that, since she has done it before during practice, but that doesn't help much to calm her nervousness and tension Yet she knows that soon it will be over with, and she will feel the pride of her accomplishment, and then she will hardly be able to wait to do it again.

While the first example was written by a S with average scores on the needs being considered, the author of the last story had very high needs to achieve and dominate, and low need to affiliate. This pattern is reflected in her story, where minimal reference is made to the male acrobat, and her desire and conquering of fears over success predominate.

May mentioned (1966) that the D/E pattern is relative, not absolute. This can be seen in another S's story which centers on the struggle and has no major uplift.

There is great concentration, the bodies are rigid and tense--every muscle is contracted and ready for use (After this act, the rest) will now be easy for them since the most difficult stage of the performance is past.

The contrast between this TAT response and the two preceding ones is illuminated by knowing that this last S had exceptionally low scores on nAch and nDom, and low affiliation need.

Continuing this line of reasoning, Ss with low need scores were compared with those with high on the D/E fantasy measure. In all cases, those with high dominance also had high nAch.

The common theme among Ss scoring high on all three needs considered was once having practiced diligently and mastered the trick, they felt confident and proud. All spoke of a positive relationship between the male and female trapeze artists; one added as an afterthought that they might be lovers. Three Ss were included in this cluster; all were female. The average DE score was 2.3, above mean (1.06) for all Ss.

Stories written by Ss with low nAch and low nDom (average nAff) have a bizarre quality. Included in this group is the female deviant, who scored -11 on the D/E measure. The others are males. With or without including the deviant's score, their average score is low (-4.0, -1.7, female and male respectively). One man wrote a story of revenge. Paraphrasing, the female had dropped him while they were arguing over another man, and left him when he was paralyzed. He recovers spectacularly, and takes her new partner's place in the act to surprise her. She "gets a case of sweaty knees and slips . . . lands on her feet." Another male S reported that the "male partner is hanging from two snakes . . . he will be bitten and the two will come crashing down in a whirling end over end spin."

As mentioned, the experimental manipulation of the picture produced no statistically significant effect. Albeit, reversing the sex of the figures was reflected in several of the stories, some negatively, some with a positive tone. One female comments that the female trapeze artist "is not strong enough to hold him, she tries with all her might to save him But, he slips from her hands and falls to his death." One man explains the reversal as a necessity. As a result of a prior accident, the male can no longer support himself. He trains his wife to perform so she can act as his catcher. Even with the female in the dominant position, this S managed to maintain a male-superior theme. It is interesting to note he had low nAch, average nDom and nAff.

In contrast, one male was pleased by the show of strength in his female partner. His story centers on two gymnasts who train diligently for three weeks to perform in a Charity Circus.

Surprisingly we mastered some simple relays. I was the pivot and Mary would free swing and release. Within a week she even got to the point where she could sommersault twice before I caught her. Then, Mary suggested that she pivot and I release. "Not on your life," I said, "you wouldn't be able to hold me." "Nonsense," said Mary, "I'm just as capable as you." Finally the moment came. I was to swing back and forth until she and I were in sequence. I signalled my readiness. "Go." I released, spun outwards, felt myself falling and . . . snap. She caught me and pulled me up."

Some unusual responses to the experimental picture were observed. A female S ignored the cue stimulus, and wrote of

a male catching the female. This type of denial was seen in Horner's Ss (1972). Another male acknowledged the stimulus and added that he would

prefer looking at the picture upside down and seeing it as a man and woman jointly free-falling from an airplane with what appears to be the tent in the over view being farmland or such No matter which view looked at--will end safely.

Several avenues of future research are suggested by the results of this study. The underlying dimensions of the D/E fantasy score should be explored further with regard to its correlates with personality factors. The emergence of several needs on the ACL as relevant factors may aid in a broader interpretation and understanding of the dimensions. In particular, the various regression analyses suggested that needs for nurturance, autonomy, deference, endurance, and succorance, though not included in the literature, are worth investigating in the future.

One conclusion drawn in this section was that the socio-cultural milieu has an effect on personality needs, and these in turn bear some relevance to the patterns of fantasy stories. A major finding of this study demonstrated a reversal of traditional sex-role motives or needs. With regard to the future use of the D/E measure, various reference groups and differing age groups should be used. This follows because

sex differences tend to be blurred in university populations (see May, 1966; Bramante, 1970), and nAch may be at its height in college years (Bardwick, 1971). The use of other samples drawn from various age groups and socio-economic and ethnic backgrounds may be more descriptive in relating individuals' needs to their D/E score. A useful approach may be in gathering longitudinal data, since at present no developmental patterns of adults on the D/E measure has been reported.

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APPENDIX

Identification Number _____

Age _____ Sex M F Other _____

Religion _____

Section: Day _____ Time _____ Coordinator _____

PLEASE DO NOT TORN THIS PAPER
DOWN, ALL INSTRUCTIONS HAVE
BEEN CLARIFIED

yes _____ no _____

5.5. OTHERS READ CAREFULLY BEFORE TURNING THE PAGE

On the following pages are a series of pictures that you are to look at and then make up imaginative stories about. After you have finished reading these instructions, you should turn the page and look at the first picture for about 20 seconds, then turn the page again and write an imaginative story that is suggested to you by the picture. You will have 5 minutes to write a story to each of the four pictures. Do not spend any longer than 5 minutes on any one picture. If you finish writing your story to one picture before the 5 minutes is up, go on to the next picture and write a story about it.

To help you think about possible elements of a story in the allowed time, you will find three questions on the page following the picture. These questions are:

1. Who are the people? What has led up to the situation in the picture?
2. What is happening now? What are they feeling, and thinking?
3. What happens next, what's the outcome?

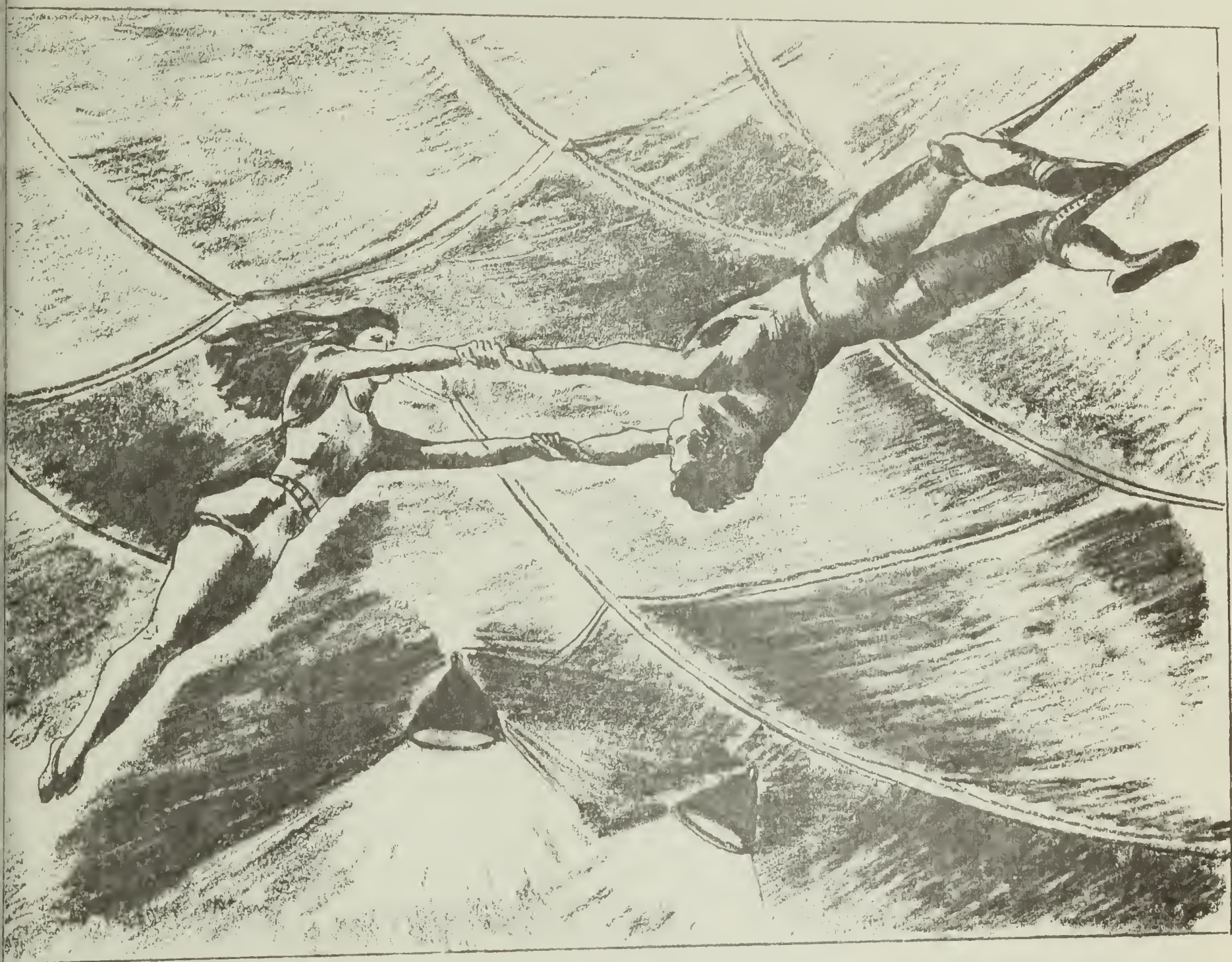
These questions are only guides for your thinking and need not be answered specifically. That is, your story to each picture should be continuous and not just specific answers to these questions.

Do not worry about whether there are right or wrong kinds of stories to write. The most important thing is to make as vivid, imaginative stories suggested to you by the pictures. The pictures are designed to give you an idea of what to write about, but don't be concerned about describing the picture perfectly. Use each picture and the questions following it only as a guide to telling creative, dramatic stories.

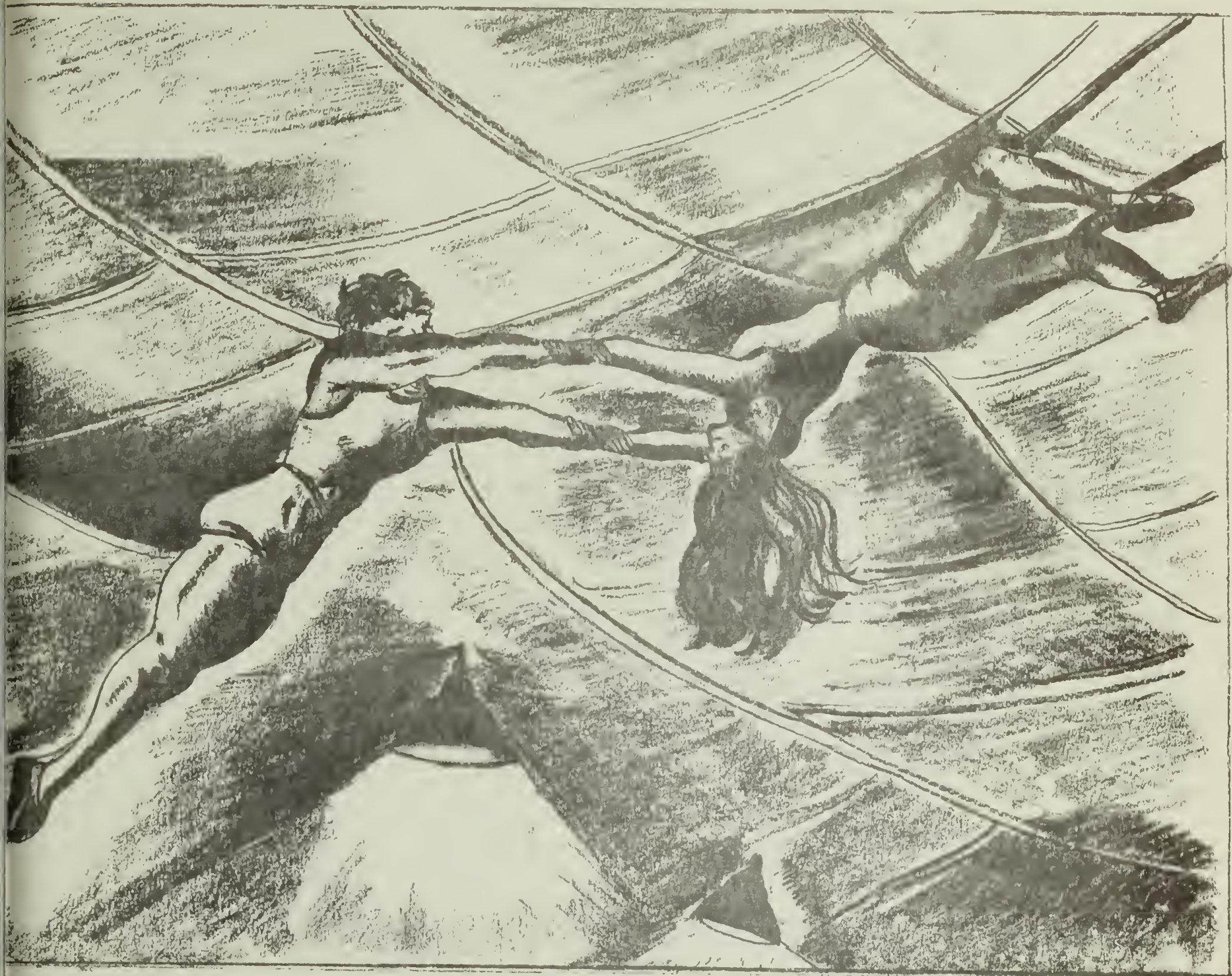
When you have read these instructions carefully turn the page, look at the first picture for about 20 seconds, then turn the page again and write a story that is suggested to you by the picture. When you have finished your story, or when 5 minutes is up, turn the page and look at the next picture, then turn the page again, write the story, and so on until you have written four stories.

The group leader will tell you when the 5 minutes is up for each story.

WHEN YOU HAVE FINISHED THE STORY, GO ON TO THE NEXT PICTURE.



Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.



Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.



Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.



Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.



Just look at the picture briefly (10-15 seconds), turn the page and write out the story it suggests.

WORK RAPIDLY. DON'T SPEND OVER 5 MINUTES ON THIS STORY. THE
QUESTIONS BELOW ARE GUIDELINES.

1. Who are the people? What has led up to the situation in the picture?

2. What is happening now? What are they feeling and thinking?

3. What happens next, what's the outcome?

WHEN YOU HAVE FINISHED THE STORY, GO ON TO THE NEXT PICTURE.

● Use No. 2½ or softer pencil ● Fill circles heavily ● Erase any errors or stray marks completely ● Do not use ball point or ink

151 ○ mild	181 ○ practical	211 ○ sarcastic	241 ○ sophisticated	271 ○ tough
152 ○ mischievous	182 ○ praising	212 ○ self-centered	242 ○ spendthrift	272 ○ trusting
153 ○ moderate	183 ○ precise	213 ○ self-confident	243 ○ spineless	273 ○ unaffected
154 ○ modest	184 ○ prejudiced	214 ○ self-controlled	244 ○ spontaneous	274 ○ unambitious
155 ○ moody	185 ○ preoccupied	215 ○ self-denying	245 ○ spunky	275 ○ unassuming
156 ○ nagging	186 ○ progressive	216 ○ self-pitying	246 ○ stable	276 ○ unconventional
157 ○ natural	187 ○ prudish	217 ○ self-punishing	247 ○ steady	277 ○ undependable
158 ○ nervous	188 ○ quarrelsome	218 ○ self-seeking	248 ○ stern	278 ○ understanding
159 ○ noisy	189 ○ queer	219 ○ selfish	249 ○ stingy	279 ○ unemotional
160 ○ obliging	190 ○ quick	220 ○ sensitive	250 ○ stolid	280 ○ unexcitable
161 ○ obnoxious	191 ○ quiet	221 ○ sentimental	251 ○ strong	281 ○ unfriendly
162 ○ opinionated	192 ○ quitting	222 ○ serious	252 ○ stubborn	282 ○ uninhibited
163 ○ opportunistic	193 ○ rational	223 ○ severe	253 ○ submissive	283 ○ unintelligent
164 ○ optimistic	194 ○ rattlebrained	224 ○ sexy	254 ○ suggestive	284 ○ unkind
165 ○ organized	195 ○ realistic	225 ○ shallow	255 ○ sulky	285 ○ unrealistic
166 ○ original	196 ○ reasonable	226 ○ sharp-witted	256 ○ superstitious	286 ○ unscrupulous
167 ○ outgoing	197 ○ rebellious	227 ○ shiftless	257 ○ suspicious	287 ○ unselfish
168 ○ outspoken	198 ○ reckless	228 ○ show-off	258 ○ sympathetic	288 ○ unstable
169 ○ pcinstaking	199 ○ reflective	229 ○ shrewd	259 ○ tactful	289 ○ vindictive
170 ○ patient	200 ○ relaxed	230 ○ shy	260 ○ tactless	290 ○ versatile
171 ○ peaceable	201 ○ reliable	231 ○ silent	261 ○ talkative	291 ○ warm
172 ○ peculiar	202 ○ resentful	232 ○ simple	262 ○ temperamental	292 ○ wary
173 ○ persevering	203 ○ reserved	233 ○ sincere	263 ○ tense	293 ○ weak
174 ○ persistent	204 ○ resourceful	234 ○ slipshod	264 ○ thankless	294 ○ whiny
175 ○ pessimistic	205 ○ responsible	235 ○ slow	265 ○ thorough	295 ○ wholesome
176 ○ planful	206 ○ restless	236 ○ sly	266 ○ thoughtful	296 ○ wise
177 ○ pleasant	207 ○ retiring	237 ○ smug	267 ○ thrifty	297 ○ withdrawn
178 ○ pleasure-seeking	208 ○ rigid	238 ○ snobbish	268 ○ timid	298 ○ witty
179 ○ poised	209 ○ robust	239 ○ sociable	269 ○ tolerant	299 ○ worrying
180 ○ polished	210 ○ rude	240 ○ soft-hearted	270 ○ touchy	300 ○ zany

